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THIRTEENTH ANNUAL REPORT

—OF THE—

ILLINOIS

State Bee-Keepers' Association

Organized February 26, 1891, at
Springfield, Illinois

COMPILED BY
JAMES A. STONE, SECRETARY,
R. R. 4, Springfield, Ill.

SPRINGFIELD, ILL.:
Illinois State Register Print.
1914

ILLINOIS STATE CAPITOL BUILDING AT SPRINGFIELD.
BEE-KEEPERS' MEETING PLACE.

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Letter of Transmittal.

OFFICE OF THE SECRETARY,
R. R. 4, SPRINGFIELD, ILL., March 1, 1914.

To His Excellency Edward F. Dunne, Governor of the State of Illinois:

SIR: I have the honor to transmit herewith the Thirteenth Annual Report of the Illinois State Bee-Keepers' Association.

Respectfully submitted,

JAMES A. STONE, *Secretary.*

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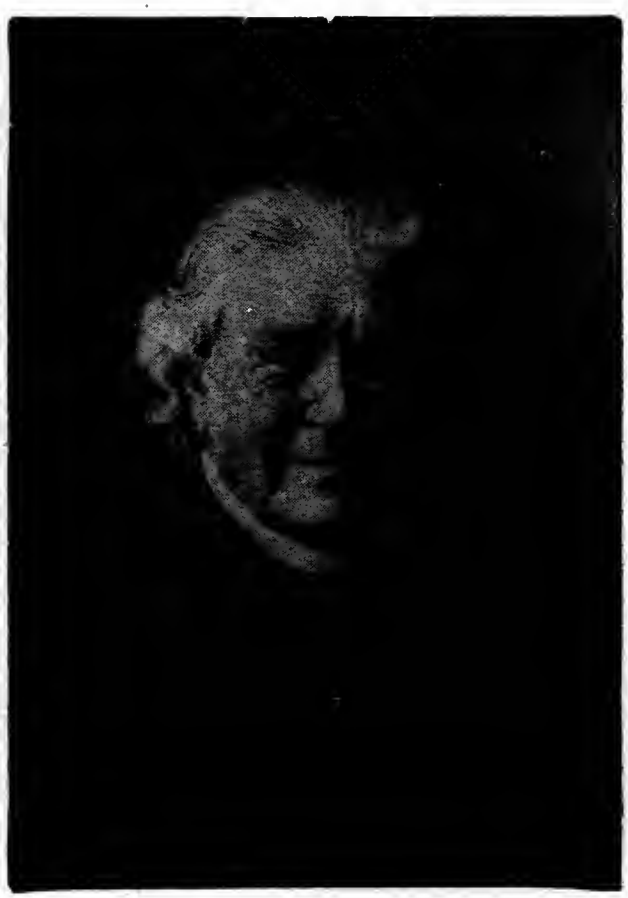


FATHER LANGSTROTH,
Inventor of the Movable Frame Hive.

OFFICERS

—OF THE—

Illinois State Bee-Keepers' Association

FOR 1914

E. J. BAXTER, ... President

Nauvoo, Ill.

A. L. KILDOW, ... Putnam

State Foul Brood Inspector.

Vice-Presidents.

1st—AARON COPPIN, ... Wenona

2d—W. B. MOORE, ... Altona

3d—H. S. DUBY, ... St. Anne

4th—I. E. PYLES, ... Putnam

5th—HENRY DADANT, ... Hamilton

JAMES A. STONE, ... Secretary

CHAS. BECKER, ... Treasurer

Pleasant Plains.

List of members will appear in back of Report. Also Statistical Report.

Formation of the Illinois State Bee-Keepers' Association.

Springfield, Ill., Feb. 26, 1891.

The Capitol Bee-Keepers' Association was called to order by President P. J. England.

Previous notice having been given that an effort would be made to form a State Association, and there being present bee-keepers from different parts of the State, by motion, a recess was taken in order to form such an Association.

P. J. England was chosen temporary chairman and C. E. Yocum temporary secretary. On motion, the Chair appointed Thos. G. Newman, C. P. Dadant and Hon. J. M. Hambaugh a committee on constitution.

Col. Chas. F. Mills addressed the meeting on the needs of a State Association, and stated that it was his opinion that the bee-keepers should have a liberal appropriation for a State Apiarian Exhibit at the World's Columbian Exposition.

A motion to adjourn till 1:30 p. m. prevailed.

AFTERNOON SESSION.

The Committee on Constitution reported a form for same, which, on motion, was read by the Secretary, by sections serially.

Geo. F. Robbins moved to substitute the word "shall" for "may" in the last clause of Section 1, Article III. This led to a very animated discussion, and the motion was lost.

J. A. Stone moved to amend the above-named section by striking out the word "ladies" and all that followed of the same section, which motion led to further discussion, and motion finally prevailed.

Section 2, Article II., relating to a quorum, was, on motion, entirely stricken out.

Mr. Robbins moved to amend Article V. by adding the words "Thirty days' notice having been given to each member." Prevailed.

Thos. G. Newman moved to adopt the Constitution, so amended, as a whole. Which motion prevailed.

See Constitution.

J. A. Stone moved that the Chair appoint a nominating committee of three on permanent organization. Prevailed.

Chair appointed as such committee, Col. Chas. F. Mills, Hon. J. M. Hambaugh, and C. P. Dadant.

Committee retired and in a few minutes returned, submitting the following named persons as candidates for their respective offices:

For President—P. J. England, Fancy Prairie.

For Vice Presidents—Mrs. L. Harrison, Peoria; C. P. Dadant, Hamilton; W. T. F. Petty, Pittsfield; Hon. J. M. Hambaugh, Spring; Dr. C. C. Miller, Marengo.

Secretary—Jas. A. Stone, Bradfordton.

Treasurer—A. N. Draper, Upper Alton.

Mr. Black moved the adoption of the report of the committee on nominations. The motion prevailed, and the officers as named by the committee were declared elected for the ensuing year.

Hon. J. M. Hambaugh moved that Mr. Thos. G. Newman, editor American Bee Journal, of Chicago, be made the first honorary member of the Association. Prevailed.

At this point Col. Chas. F. Mills said: "Mr. Chairman, I want to be the first one to pay my dollar for membership," at the same time suiting his action to his words, and others followed his example, as follows:

CHARTER MEMBERS.

Col. Chas. F. Mills, Springfield.
Hon. J. M. Hambaugh, Spring.
Hon. J. S. Lyman, Farmingdale.
C. P. Dadant, Hamilton.
Chas. Dadant, Hamilton.
A. N. Draper, Upper Alton.
S. N. Black, Clayton.
Aaron Coppin, Wenona.
Geo. F. Robbins, Mechanicsburg.
J. W. Yocum, Williamsville.
Thos. S. Wallace, Clayton.
A. J. England, Fancy Prairie.
P. J. England, Fancy Prairie.
C. E. Yocom, Sherman.
Jas. A. Stone, Bradfordton.

FIRST HONORARY MEMBER.

Thos. G. Newman, editor American Bee Journal, Chicago.

State of Illinois—Department of State

ISAAC N. PEARSON, Secretary of State.

To all to whom these Presents shall come—GREETING:

Whereas, A certificate duly signed and acknowledged having been filed in the office of the Secretary of State on the 27th day of February, A. D. 1891, for the organization of the Illinois State Bee-keepers' Association, under and in accordance with the provisions of "An Act Concerning Corporations," approved April 18, 1872, and in force July 1, 1872, and all acts amendatory thereof, a copy of which certificate is hereunto attached.

Now, Therefore, I, Isaac N. Pearson, Secretary of State, of the State of Illinois, by virtue of the powers and duties vested in me by law, do hereby certify that the said, The Illinois State Bee-Keepers' Association, is a legally organized corporation under the laws of the State.

In Testimony Whereof, I hereunto set my hand and cause to be affixed the great seal of State.

Done at the City of Springfield, this 27th day of February, in the [Seal] year of our Lord one thousand eight hundred and ninety one, and the Independence of the United States the one hundred and fifteenth.

I. N. PEARSON,
Secretary of State.

STATE OF ILLINOIS, } ss.
County of Sangamon. }

To Isaac N. Pearson, Secretary of State:

We, the undersigned, Perry J. England, Jas. A. Stone and Albert N. Draper, citizens of the United States, propose to form a corporation under an act of the General Assembly of the State of Illinois, entitled "An Act Concerning Corporations," approved April 18, 1872, and all acts amendatory thereof; and for the purposes of such organizations, we hereby state as follows, to-wit:

1. The name of such corporation is, The Illinois State Bee-Keepers' Association.

2. The object for which it is formed is, to promote the general interests of the pursuit of bee-culture.

3. The management of the aforesaid Association shall be vested in a board of three Directors, who are to be elected annually.

4. The following persons are hereby selected as the Directors, to control and manage said corporation for the first year of its corporate existence, viz.: Perry J. England, Jas. A. Stone, and Albert N. Draper.

5. The location is in Springfield, in the County of Sangamon, State of Illinois. (Signed.)

Perry J. England,
Jas. A Stone,
Albert N. Draper.

STATE OF ILLINOIS, } ss.
Sangamon County. }

I, S. Mendenhall, a notary public in and for the County and State aforesaid, do hereby certify that on this 26th day of February, A. D. 1891, personally appeared before me, Perry J. England, James A. Stone and Albert N. Draper, to me personally known to be the same persons who executed the foregoing certificate, and severally acknowledged that they had executed the same for the purposes therein set forth.

In witness whereof, I have hereunto set my hand and seal the day and year above written.

S. Mendenhall,
[Seal] Notary Public.

CONSTITUTION AND BY-LAWS

—OF THE—

Illinois State Bee-Keepers' Association

CONSTITUTION

Adopted Feb. 26, 1891.

ARTICLE I.—Name.

This organization shall be known as The Illinois State Bee-Keepers' Association, and its principal place of business shall be at Springfield, Ill.

ARTICLE II.—Object.

Its object shall be to promote the general interests of the pursuit of bee-culture.

ARTICLE III.—Membership.

Section 1. Any person interested in Apiculture may become a member upon the payment to the Secretary of an annual fee of one dollar ($1.00). (Amendment adopted at annual meeting, November, 1905): And any affiliating Association, as a body, may become members on the payment of an aggregate fee of fifty cents (50c) per member, as amended Nov., 1910.

Sec. 2. Any persons may become honorary members by receiving a majority vote at any regular meeting.

ARTICLE IV.—Officers.

Section 1. The officers of this Association shall be, President, Vice-President, Secretary and Treasurer. Their terms of office shall be for one year, or until their successors are elected and qualified.

Sec. 2. The President, Secretary and Treasurer shall constitute the Executive Committee.

Sec. 3. Vacancies in office — by death, resignation and otherwise— shall be filled by the Executive Committee until the next annual meeting.

ARTICLE V.—Amendments.

This Constitution shall be amended at any annual meeting by a two-thirds vote of all the members present— thirty days' notice having been given to each member of the Association.

BY-LAWS

ARTICLE I.

The officers of the Association shall be elected by ballot and by a majority vote.

ARTICLE II.

It shall be the duty of the President to call and preserve order at all meetings of this Association; to call for all reports of officers and committees; to put to vote all motions regularly seconded; to count the vote at all elections, and declare the results; to decide upon all questions of order, and to deliver an address at each annual meeting.

ARTICLE III.

The Vice-Presidents shall be numbered, respectively, First, Second, Third, Fourth and Fifth, and it shall be

the duty of one of them, in his respective order, to preside in the absence of the President.

ARTICLE IV.

Section 1. It shall be the duty of the Secretary to report all proceedings of the Association, and to record the same, when approved, in the Secretary's book; to conduct all correspondence of the Association, and to file and preserve all papers belonging to the same; to receive the annual dues and pay them over to the Treasurer, taking his receipt for the same; to take and record the name and address of every member of the Association; to cause the Constitution and By-Laws to be printed in appropriate form, and in such quantities as may be directed by the Executive Committee from time to time, and see that each member is provided with a copy thereof; to make out and publish annually, as far as practicable, statistical table showing the number of colonies owned in the spring and fall, and the amount of honey and wax produced by each member, together with such other information as may be deemed important, or be directed by the Executive Committee; and to give notice of all meetings of the Association in the leading papers of the State, and in the bee journals at least four weeks prior to the time of such meeting.

Sec. 2. The Secretary shall be allowed a reasonable compensation for his services, and to appoint an assistant Secretary if deemed necessary.

ARTICLE V.

It shall be the duty of the Treasurer to take charge of all funds of the Association, and to pay them out upon the order of the Executive Committee, taking a receipt for the same; and to render a report of all receipts and expenditures at each annual meeting.

ARTICLE VI.

It shall be the duty of the Executive Committee to select subjects for discussion and appoint members to deliver addresses or read essays, and to transact all interim business.

ARTICLE VII.

The meeting of the Association shall be, as far as practicable, governed by the following order of business:

Call to order.
Reading minutes of last meeting.
President's address.
Secretary's report.
Treasurer's report.
Reports of committees.
Unfinished business.
Reception of members and collection.
Miscellaneous business.
Election and installation of officers.
Discussion.
Adjournment.

ARTICLE VIII.

These By-Laws may be amended by a two-thirds vote of all the members present at any annual meeting.

C. E. Yocom,
Aaron Coppin,
Geo. F. Robbins

Following is a copy of the law passed by the Illinois Legislature May 19th, and signed by the Governor June 7th, 1911, to take effect July 1st, 1911:

State Inspector of Apiaries.

Preamble.
§ 1. State Inspector of Apiaries—appointment—term—assistants—per diem.
§ 2. Foul Brood, Etc.—what declared nuisances—inspection—notice to owner or occupant—treatment—abatement of nuisance—appeal.
§ 3. Annual Report.
§ 4. Penalties.

HOUSE BILL NO. 670.

(Approved June 7, 1911.)

An Act to prevent the introduction and spread in Illinois of foul brood among bees, providing for the appointment of a State Inspector of Apiaries and prescribing his powers and duties.

Whereas, the disease known as foul brood exists to a very considerable extent in various portions of this State, which, if left to itself, will soon exterminate the honey-bees; and

Whereas, the work done by an individual bee-keepeer or by a State inspector is useless so long as the official is not given authority to inspect and, if need be, to destroy the disease when found; and

Whereas, there is a great loss to the bee-keepers and fruit growers of the State each year by the devastating ravages of foul brood;

Section 1. **Be it enacted by the People of the State of Illinois, represented in the General Assembly:** That the Governor shall appoint a State inspector of Apiaries, who shall hold his office for the term of two years, and until his successor is appointed and qualified, and who may appoint one or more assistants, as needed, to carry on the inspection under his supervision. The Inspector of Apiaries shall receive for each day actually and necessarily spent in the performance of his duties the sum of Four Dollars to be paid upon bills of particulars certified to as correct by the said State Inspector of Apiaries, and approved by the Governor.

Sec. 2. It shall be the duty of every person maintaining or keeping any colony or colonies of bees to keep the same free from the disease known as foul brood and from every contagious and infectious disease among bees. All bee-hives, bee-fixtures or appurtenances where foul brood or other contagious or infectious diseases among bees exists, are hereby declared to be nuisances to be abated as hereinafter prescribed. If the inspector of apiaries shall have reason to believe that any apiary is infected by foul brood or other contagious disease, he shall have power to inspect, or cause to be inspected, from time to time, such apiary, and for the purpose of such inspection he, or his assistants, are authorized during reasonable business hours to enter into or upon any farm or premises, or other building or place used for the purpose of propagating or nurturing bees. If said inspector of apiaries, or his assistants, shall find by inspection that any person, firm or corporation is maintaining a nuisance as described in this section, he shall notify in writing the owner or occupant of the premises containing the nuisance so disclosed of the fact that such nuisance exists. He shall include in such notice a statement of the conditions constituting such nuisance, and order that

the same be abated within a specified time and a direction, written or printed, pointing out the methods which shall be taken to abate the same. Such notice and order may be served personally or by depositing the same in the post office properly stamped, addressed to the owner or occupant of the land or premises upon which such nuisance exists, and the direction for treatment may consist of a printed circular, bulletin or report of the Inspector of Apiaries, or an extract from same.

If the person so notified shall refuse or fail to abate said nuisance in the manner and in the time prescribed in said notice, the Inspector of Apiaries may cause such nuisance to be abated, and he shall certify to the owner or person in charge of the premises the cost of the abatement and if not paid to him within sixty days thereafter the same may be recovered, together with the costs of action, before any court in the State having competent jurisdiction.

In case notice and order served as aforesaid shall direct that any bees, hives, bee-fixtures or appurtenances shall be destroyed and the owner of such bees, hives, bee-fixtures or appurtenances shall consider himself aggrieved by said order, he shall have the privilege of appealing within three days of the receipt of the notice to the county court of the county in which such property is situated. The appeal shall be made in like manner as appeals are taken to the county court from judgments of justices of the peace. Written notice of said appeal served by mail upon the Inspector of Apiaries shall operate to stay all proceedings until the decision of the county court, which may, after investigating the matter, reverse, modify or affirm the order of the Inspector of Apiaries. Such decision shall then become the order of the Inspector of Apiaries, who shall serve the same as hereinbefore set forth and shall fix a time within which such decision must be carried out.

Sec. 3. The Inspector of Apiaries shall, on or before the second Monday in December of each calendar year, make a report to the Governor and also to the Illinois State Bee Keepers' Association, stating the number of apiaries visited, the number of those diseased and treated, the number of colonies of bees destroyed and the expense incurred in the performance of his duties.

Sec. 4. Any owner of a diseased apiary or appliances taken therefrom, who shall sell, barter or give away any such apiary, appliance, queens or bees from such apiary, expose other bees to the danger of contracting such disease, or refuse to allow the Inspector of Apiaries to inspect such apiary, or appliances, shall be fined not less than $50.00 nor more than $100.00.

Approved June 7, 1911.

(Bill passed in the 47th General Assembly.)

Bee-Keepers' Association

§ 1. Appropriates $1,000 per annum—proviso.
§ 2. How drawn.
§ 3. Annual Repoort.

HOUSE BILL NO. 99.

(Approved June 5th, 1911.)

An Act making an appropriation for the Illinois State Bee-Keepers' Association.

Whereas, The members of the Illinois State Bee-Keepers' Association have for years given much time and labor without compensation in the endeavor to promote the interests of the bee-keepers of the State; and,

Whereas, The importance of the industry to the farmers and fruit-growers of the State warrants the expenditure of a reasonable sum for the holding of annual meetings, the publication of reports and papers containing practical information concerning bee-keeping, therefore, to sustain the same and enable this organization to defray the expenses of annual meetings, publishing reports, suppressing foul brood among bees in the State, and promote the industry in Illinois;

Section 1. Be it enacted by the People of the State of Illinois represented in the General Assembly: That there be and is hereby appropriated for the use of the Illinois State Bee-Keepers' Association the sum of one thousand dollars ($1,000) per annum for the years 1911 and 1912. For the purpose of advancing the growth and developing the interests of the bee-keepers of Illinois, said sum to be expended under the direction of the Illinois State Bee-Keepers' Association for the purpose of paying the expenses of holding annual meetings, publishing the proceedings of said metings, suppressing foul brood among bees in Illinois, etc.

Provided, however, That no officer or officers of the Illinois State Bee-Keepers' Association shall be entitled to receive any money compensation whatever for any services rendered for the same, out of this fund.

Sec. 2. That on the order of the President, countersigned by the Secretary of the Illinois State Bee-Keepers' Association, and approved by the Governor, the Auditor of Public Accounts shall draw his warrant on the Treasurer of the State of Illinois in favor of the treasurer of the Illinois State Bee-Keepers' Association for the sum herein appropriated.

Sec. 3. It shall be the duty of the treasurer of the Illinois State Bee-Keepers' Association to pay out of said appropriation, on itemized and receipted vouchers, such sums as may be authorized by vote of said organization on the order of the president, countersigned by the secretary, and make annual report to the Governor of all such expenditures, as provided by law.

Code of Rules and Standards for Grading Apiarian Exhibits at Fair as Adopted by Illinois State Bee-Keepers' Association.

COMB HONEY.

Rule 1. Comb honey shall be marked on a scale of 100, as follows:

Quantity	40
Quality	40
Style of display	20

Rule 2. Points of quality should be:

Variety	5
Clearness of capping	10
Completeness of capping	5
Completeness of filling	5
Straightness of comb	5
Uniformity	5
Style of section	5

Remarks: 1. By varlety is meant different kinds, with regard to the sources from which the honey is gathered, which adds much interest to an exhibit.

2. By clearness of capping is meant freedom from travel stain and a water soaked appearance. This point is marked a little high, because it is a most important one. There is no better test of the quality of comb honey than the appearance of the cappings. If honey is taken off at the proper time, and cared for as it should be. so as to preserve its original clear color, body and flavor will take care of themselves, for excellence in the last two points always accompanies excellence in the first. Clover and basswood honey shoud be white; heartsease, a dull white tinged with yellow; and Spanish needle, a bright yellow.

3. By uniformity is meant closeness of resemblance in the sections composing the exhibit.

4. By style is meant neatness of the sections, freedom from propolis, etc.

5. Honey so arranged as to show every section should score the highest in style of display, and everything that may add to the tastiness and attractivness of an exhibit should be considered.

EXTRACTED HONEY.

Rule 1. Extracted honey should be marked on a scale of 100, as follows:

Quantity	40
Quality	45
Style of display	15

Rule 2. The points of quality should be:

Variety	10
Clearness of color	5
Body	5
Flavor	5
Style of package	10
Variety of package	5
Finish	5

Remarks: 1. Light clover honey pouring out of a vessel is a very light straw color; Spanish needle, a golden hue, and dark clover honey, a dull amber.

2. Style of package is rated a little high, not only because in that consists the principal beauty of an exhibit of extracted honey, but also because it involves the best package for marketing. We want to show honey in the best shape for the retail trade, and that, in this case, means the most attractive style for exhibition. Glass packages should be given the preference over tin; flint glass over green, and smaller vessels over larger, provided the latter run over one or two pounds.

3. By variety of package is meant chiefly different sizes; but small pails for retailing, and, in addition, cans or kegs (not too large) for wholesaling, may be considered. In the former case, pails painted in assorted colors, and lettered "Pure Honey," should be given the preference.

4. By finish is meant capping, labeling, etc.

5. Less depends upon the manner of arranging an exhibit of extracted than of comb honey, and for that reason, as well as to give a higher number of points to style of package, a smaller scale is allowed for style of display.

SAMPLES OF COMB AND EXTRACTED HONEY.

Rule 1. Single cases of comb honey, entered as such for separate premiums, should be judged by substantially the same rules as those given for a display of comb honey, and samples of extracted, by those governing displays of extracted honey.

Rule 2. Samples of comb or extracted honey, as above, may be considered as part of the general display in their respective departments.

GRANULATED HONEY.

Rule 1. Candied or granulated honey should be judged by the rules for extracted honey, except as below.

Rule 2. The points of quality should be:

Variety	10
Fineness of grain	5
Color	5
Flavor	5
Style of package	10
Variety of package	5
Finish	5

Rule 3. An exhibit of granulated honey may be entered or considered as part of a display of extracted honey.

NUCLEI OF BEES.

Rule. Bees in observation hives should be maked on a scale of 100, as follows:

Color and markings	30
Size of bees	30
Brood	10
Queen	10
Quietness	5
Style of comb	5
Style of hive	10

Remarks: 1. Bees should be exhibited only in the form of single frame nuclei, in hives or cages with glass sides.

2. Italian bees should show three or more bands, ranging from leather color to golden or light yellow.

3. The markings of other races should be those claimed for those races in their purity.

4. A nucleus from which the queen is omitted should score zero on that point.

5. The largest quantity of brood in all stages or nearest to that should score the highest in that respect.

6. The straightest, smoothest and most complete comb, with the most honey consistent with the most brood, should score the highest in that respect.

7. That hive which is neatest and best made and shows the bees, etc., to the best advantage should score the highest.

QUEEN BEES.

Rule. Queen bees in cages should be marked on a scale of 100, as follows:

Quantity	40
Quality and variety	40
Style of caging and display	20

Remarks: 1. The best in quality consistent with variety should score the highest. A preponderence of Italian queens should overweigh a preponderance of black ones, or, perhaps, of any other race or strain; but sample queens of any or all varieties should be duly considered. Under the head of quality should also be considered the attendant bees. There should be about a dozen with each queen.

2. Neatness and finish of cages should receive due consideration, but the principal points in style are to make and arrange the cages so as to show the inmates to the best advantage.

BEESWAX.

Rule. Beeswax should be marked on a scale of 100, as follows:

Quantity	40
Quality	40
Style of display	20

Remarks: 1. Pale, clear, yellow specimens should score the highest, and the darker grades should come next in order.

2. By style is meant chiefly the forms in which the wax is molded and put up for exhibition. Thin cakes or small pieces are more desirable in the retail trade than larger ones. Some attention may be given to novelty and variety.

Foul Brood and Other Diseases of Bees

Foul brood—bacillus alvei—is a fatal and contagious disease among bees, dreaded most of all by bee-keepers. The germs of disease are either given to the young larval bee in its food when it hatches from the egg of the queen-bee, or it may be contagion from a diseased colony, or if the queen deposits eggs, or the worker-bees store honey or pollen in such combs. If in any one of the above cases, the disease will soon appear, and the germs increase with great rapidity, going from one little cell to another, colony to colony of bees, and then to all the neighboring apiaries, thus soon leaving whole apiaries with only diseased combs to inoculate others. The Island of Syria in three years lost all of its great apiaries from foul brood. Dzierzon, in 1868, lost his entire apiary of 500 colonies. Cowan, the editor of the British Bee Journal, recently wrote: "The only visible hindrance to the rapid expansion of the bee industry is the prevalence of foul brood, which is so rapidly spreading over the country as to make bee-keeping a hazardous occupation."

Canada's foul brood inspector, in 1890 to 1892, reported 2,395 cases, and in a later report for 1893 to 1898, that 40 per cent of the colonies inspected were diseased. Cuba is one of the greatest honey-producing countries, and was lately reported to me by a Wisconsin bee-keeper who has been there, and will soon return to Wisconsin: "So plentiful is foul brood in Cuba that I have known whole apiaries to dwindle out of existence from its ravages, and hundreds more are on the same road to sure and certain death. I, myself, took, in 90 days in Cuba, 24,000 pounds of fine honey from 100 colonies, but where is that apiary and my other 150-colony apiary? Dead from foul brood." Cuba, in 1901, exported 4,795,600 pounds of honey, and 1,022,897 pounds of beeswax.

Cuba at present has laws to suppress foul brood, and her inspector is doing all possible to stamp the same from the island.

Even in Wisconsin I know of several quite large piles of empty hives, where also many other apiaries where said disease had gotten a strong foothold.

By the kindness of the Wisconsin bee-keepers, and, in most cases, by their willing assistance, I have, during the last five years, gotten several counties free of the disease, and at the present writing, March 12, 1902, have what there is in Wisconsin under control and quarantined. This dreadful disease is often imported into our State from other States and countries, so we may expect some new cases to develop until all the States shall enact such laws as will prevent further spread of the same. Arizona, New York (1899), California (1891), Nebraska (1895), Utah (1892), Colorado (1897), have county inspectors, and Wisconsin (1897), and Michigan (1901), have State inspectors. The present Wisconsin law, after five years of testing and rapid decrease of the disease, is considered the best, and many other States are now making efforts to secure a like law.

There are several experimental apiaries in Canada, under control of the Ontario Agricultural College; also a few in the United States, especially in Colorado, that have done great work for the bee-keeping industry, and their various published bulletins on the same are very valuable. The Wisconsin State Bee-Keepers' Association has asked that an experimental apiary might be had on the Wisconsin Experimental Farm, but at present there are so many departments asking for aid that I fear it may be some time before bee-culture will be taken up.

Causes of Foul Brood.

1. Many writers claim foul brood originates from chilled or dead brood. Dr. Howard, of Texas, one of the best

practical modern scientific experimenters, a man of authority, has proven beyond a doubt that chilled or common dead brood does not produce foul brood. I have, in the last five years, also proven his statement to be true in Wisconsin, but I do believe such conditions of dead brood are the most favorable places for lodgment and rapid growth of disease. Also, I do not believe foul brood germs are floating in the air, for, if they were, why would not every brood-comb cell of an infective hive become diseased? I believe that this disease spreads only as the adult bees come in contact with it, which is often through robber-bees. Brood-combs should not be removed from any colony on cold or windy days, nor should they be left for a moment in the direct rays of sunshine on hot days.

2. The foul brood may be caused by the need of proper food and temperature. Generally this disease does not appear to be serious during a honey-flow, but at the close of the honey season, or at time of scarcity, it is quite serious, and as the bees at such times will rob anywhere they can find stores, whether from healthy or diseased combs, it is the duty of every bee-keeper to keep everything carefully protected. Hive-entrances contracted, no old combs or any article with a drop of honey in where the bees can get to it. While honey is coming in from the various flowers, quite a portion is used direct as food for the larval bee, and with such no disease would be fed to the bees. Such fed bees, even in a diseased hive, will hatch, as is often the case. I never knew a case where a bee hatched from a brood cell that had ever had foul brood in. If the germs of disease are there in the dried scale attached to the lower side walls, bees will store honey therein; the queen will deposit eggs, or the cell may be filled with pollen, or beebread, as some call it. Said honey, or pollen, when it comes in contact with those germs of disease, or the food given to the young bee, if in the proper temperature, said germs of disease will grow and develop rapidly.

Causes of Contagion.

I fully believe that if the history of foul brood in Wisconsin were known, nearly every case could be traced to contagion from diseased combs, honey, or from home diseased queen-breeders' cages. There are some instances where I have traced the history of contagion in Wisconsin:

1. Diseased apiaries, also single colonies, sold either at auction or private sale. Several law suits have resulted in the settlement of some of the cases.

2. Brood-combs and various implements from diseased hives, used by other bee-keepers, and borrowed articles.

3. All the bees in an apiary dead from foul brood, and the hives having an abundance of honey in the brood-combs, said combs placed out by the side of hives, so that neighbor's bees might get the honey. From those combs I lined robber bees to seven other apiaries, and each time became diseased and were treated.

4. Robber bees working on empty honey packages in the back yards of grocery stores and baking factories. Said honey came from diseased apiaries, some located in far distant States, even Cuba.

5. Loaning of hives, combs, extractors, and even empty honey-packages.

6. Buying honey from strangers, or not knowing where it was produced, and feeding it to bees without boiling the honey.

7. Too common a practice of using old brood-combs from some apiary where the owner's bees have died from "bad luck," as he calls it.

8. Queen-bee—by buying queen bees from strangers and introducing her in the cages they came in. I have traced several new outbreaks of the disease to the hives where such queens were introduced, and the queens came from distant States. To be safe, on arrival of queen, put her carefully alone in a new and clean cage with good food in it. Keep her in there, warm and comfortable, for a few hours before introducing. The shipping cage and every bee that came with the queen should be put in the stove and burned. I do not think there is any danger from the queen so treated, even from diseased hives, but I do know of many cases where disease soon appear in the hives, where the shipping cage and bees were put in with the colony. The great danger is in the food in said cage being made from diseased honey. I was called to attend a State bee-keepers' meeting in another State, and I asked if any there had had experience with foul

brood. There was a goodly number of raised hands. Then I asked: "Do any of you think you got the disease by buying queen-bees?" Again several hands were raised. Even bee-keepers there had traced the disease in their apiaries to the buying of queens, and all from the same breeder. If you get queens from abroad, I hope you will do with them as I have described above. Better be on the safe side.

Experiments.

1. A prominent Wisconsin bee-keeper some years ago had foul brood among his bees so bad that he lost 200 colonies before the disease was checked. Having a honey-extractor and comb-foundation machine, he first boiled the hives in a large sorghum pan, then in a kettle all combs were melted after the honey was extracted; the honye was boiled and also the extractor and implements used. The bees were returned to their hives on comb-foundation he made from the wax made from the melted combs, then fed the boiled honey. Several years have passed, and there has been no sign of disease in his apiary since.

2. Foul-brood germs are not always killed when exposed to a temperature of 212 deg. F. (boiling point) for 45 minutes. uBt in every case where the combs are boiled in boiling water, and same were well stirred while boiling, no germs were alive.

3. Foul brood in brood-combs is not destroyed when exposed to the temperature of Wisconsin winters of 20 deg. below zero, and in one case I developed foul brood from combs that had been exposed to 28 deg. below zero.

4. Honey, if stored in diseased combs, acts as a preserving medium, and in such cases the germs of disease will remain so long as the comb is undisturbed. Four years at least.

5. Honey or beeswax, or the refuse from a solar or sunheat extractor, is not heated enough to kill foul-brood germs. Several cases of contagion where robber bees worked on solar extractor refuse or honey.

6. Comb-foundation made by supply manufacturers is free from live germs of disease and perfectly safe to use. To prove this experiment beyond a doubt, I took a quantity of badly diseased brood-combs from several apiaries and render each batch of combs into wax myself on the farm where found. Then on my own foundation mill I made some brood-foundation. I also took quite a quantity more of said wax, went to two wholesale comb-foundation manufacturers, and both parties willingly made my experimental wax into comb-foundation, just the same as they do every batch of wax, I then divided the various makes of foundation, and selected 20 of the best bee-yards in Wisconsin, where no disease has ever been known; had the same placed in 62 of their best colonies, and in every case no signs of disease have appeared. Those same colonies tontinue to be the best in the various apiaries.

Symptoms of Foul Brood.

1. The infected colony is not liable to be as industrious. Hive entrance with few guard bees to protect their home. Sometimes fine dirt or little bits of old comb and dead bees in and around the hive-entrance, and often robber bees seeking entrance.

2. Upon opening the hive, the brood in the combs is irregular, badly scattered, with many empty cells which need inspection.

3. The cappings over healthy brood are oval, smooth, and of a healthy color peculiar to honey-bee brood, but if diseased, the cappings are sunken, a little darker in color, and have ragged pin holes. The dead larval bee is o fa light color, and, as it is termed, ropy, so that if a toothpick is inserted and slowly withdrawn, this dead larva will draw out much like spittle or glue.

4. In this ropy stage there is more or less odor peculiar to the disease; it smells something like an old, stale gluepot. A colony may be quite badly affected and not omit much odor, only upon opening of the hive or close examination of the brood. I have treated a few cases where the foul brood odor was plainly noticed several rods from the apiary.

5. Dried Scales.—If the disease has reached the advanced stages, all the above described conditions will be easily seen and the dried scales as well. This foul matter is so tenacious that the bees cannot remove it, so it dries down on the lower side-wall of the cell, midway from the bottom to front end of the cell, seldom on the bottom of the cell. According to its stage of development, there will be either the shapeless mass of dark brown matter,

on the lower side of the cell, often with a wrinkled skin covering, as if a fine thread had been inserted in the skin legthwise and drawn enough to form rib-like streaks on either side. Later on it becomes hardened, nearly black in color, and in time dries down to be as thin as the side walls of the cell. Often there will be a small dried bunch at the front end of the cell, not larger than a part of a common pin head. To see it plainly, take the comb by the top bar and hold it so that a good light falls into the cell at an angle of 75 degrees from the tip of the comb, while your sight falls upon the cell at an angle of about 45 degrees. The scales, if present, will easily be seen as above described. This stage of disease in combs is easily seen, and is always a sure guide or proof of foul brood. Such combs can never be used safely by the bees, and must be either burned or carefully melted. Be sure not to mistake such marked combs in the spring for those soiled with bee dysentery. The latter have a somewhat similar appearance, but are more or less surface soiled, and will also be spotted or have streaked appearance by the dark brown sticky excrements from the adult bees.

Treatment.

"A bee-keeper who does not discover foul brood, before his nostrils remind him that there is something wrong with his bees, is not the proper person to treat the case." Dr. Howard, in his valuable book on foul brood, states: "I regard the use of all drugs in the treatment of foul brood as a useless waste of time and material, wholly ineffectual, inviting ruin and total loss of bees. Any method which has not for its object the entire removal of all infectious material beyond the reach of both bees and brood, will prove detrimental and destructive, and surely encourage the recurrence of the disease." In Wisconsin, I have tried many methods of treatment, and cured some cases with each method; but the one that never fails, if carefully followed, and that commends itself, is the McEvory treatment. Canada's foul brood inspector has cured foul brood by the wholesale—thousands of cases.

McEvoy Treatment.

"In the honey season, when the bees are gathering honey freely, remove the combs in the evening and shake the bees into their own hives; give them frames with comb-foundation starters, and let them build comb for four days. The bees will make the starters into comb during the four days, and store the diseased honey in them, which they took with them from the old comb. Then, in the evening of the fourth day, take out the new combs and give them comb-foundation (full sheets) to work out, and then the cure will be complete. By this method of treatment all the diseased honey is removed from the bees before the full sheets of foundation are worked out. All the old foul-brood combs must be burned or carefully made into wax, after they are removed from the hives, and all the new combs made out of the starters during the four days must be burned or made into wax, on account of the diseased honey that would be stored in them. All the curing or treating of diseased colonies should be done in the evening, so as not to have any robbing done, or cause any of the bees from the diseased colonies to mix and go with the bees of healthy colonies. By doing all the work in the evening, it gives the bees a chance to settle down nicely before morning, and then there is no confusion or trouble. This same method of curing colonies of foul brood can be carried on at any time from May to October, when the bees are not getting any honey, by feeding plenty of sugar syrup in the evenings to take the place of the honey flow. It will start the bees robbing and spread the disease, to work with foul brood colonies in warm days when the bees are not gathering honey, and for that reason all work must be done in the evenings when no bees are flying.

"When the diseased colonies are weak in bees, put the bees, two, three, or four colonies together, so as to get a good sized colony to start the cure with, as it does not pay to spend time fussing with little, weak colonies. When the bees are not gathering honey, any apiary can be cured of foul brood by removing the diseased combs in the evening and giving the bees frames with comb-foundation starters on. Then, also, in the vening feed the bees plenty of sugar syrup, and they will draw out the foundation and sore the diseased honey which they took with them from the old combs; on the fourth evening remove the new

combs made out of the starters, and give the bees full sheets of comb-foundation, and feed plenty of sugar syrup each evening, until every colony is in first class order. Make the syrup out of granulated sugar, putting one pound of water to every pound of sugar, and bring it to a boil. As previously stated, all the old comb must be burned, or made into wax, and so must all new combs made during the four days. No colony is cured of foul brood by the use of any drug.

A. I. Root, of Medina, Ohio, says: "The starvation plan, in connection with burning the combs and frames and building the hives, has worked the best in treating foul brood. It never appeared after each treatment, though it did in some cases where the hives were honey-stained and not boiled, thus comfirming the theory or fact of spores.'"

All the difference from the McEvory treatment that I practice is this: I dig a deep pit on level ground near the diseased apiary, and after getting a fire in the pit, such diseased combs, frames, etc., as are to be burned are burned in this pit in the evening, and then the fresh earth from the pit returned to cover all from sight. Often I use some kerosene oil, a little at a time being poured on old broodcombs, or those having much honey in, as they are hard to burn. If diseased combs with honey in are burned on the surface of the soil, there is great danger; the honey, when heated a little, will run like water on the soil, and in the morning the robber bees will be busy taking home the diseased honey that was not heated enough to kill germs of foul brood.

I also cage the queen while the bees are on the five or six strips of foundation. It helps to keep the colony from deserting the hive and going to other colonies.

R. L. Taylor, Michigan University Experimental Apiary, reports: "The plan that the colony be shaken out into another hive after being allowed to build comb for four days, I have proven, in 100 cases, to be unnecessary."

In Wisconsin I, too, have cured several cases by the one transferring, when honey was not coming in very freely, but it is better, and a great saving of time to both bees and owner, to exchange in three or four days, those foundation starters, for full sheets of foundation. Diseased broodcombs and those with honey in, if melted in a sun or solar extractor, the wax, honey or residue is not hot enough to kill germs of foul brood. This I have proven by several experiments. It must be boiled and well stirred while boiling, to be safe.

I do not believe in, or practice, burning any property, such as hives, bees, beeswax or honey, that can be safely treated and saved. Many times it is poor economy to save all, and so many bee-keepers are not so situated as to keep all diseased material from robber bees while taking care of it; the best and oly safe way is to burn the diseased combs and frames.

Utah.

Utah has county inspectors, and from one who has remarkable success I copy the report of his method of treatment:

"Wherever found it should be dealt with earnestly and with dispatch. If the colony is weak, I recommend something the bees, and in order to do this without letting a bee escape, take a tablespoonful of sulphur and place it in the hive entrance of the hives; if there is any breeze, turn the hive so it will blow in the entrance. Then fire the sulphur and it will soon kill the bees. This should be done early in the morning, before any of the bees are flying, as one bee escaping fro mthe hive might carry the disease to any colony with which it may take up its abode. If the colony is a strong one, I would keep the entrance partly closed, so as to prevent any other bees from getting in. Then as soon as fruit blossoms come out so the bees can obtain honey, I treat them. I procure an empty box of any kind, so it is clean, then find the queen, put her in a screen wire cage, which is easily made. Take a small piece of screen roll it up and tie a string arond either end; cork up one end, then place the queen and a few workers, for company, in the cage, and place in the other end cork. Put same in this box, and shake all the bees out of their hive into this box. This must be done in the evening, when no bees are flying. Keep the queen in this box for 24 to 48 hours, allowing the bees to fly in and out as they please. Next take a clean hive, with good, healthy combs or founda-

tion, and shake bees into it, letting the queen go, and they will be free from disease. The old combs are melted into wax, bringing same to a good boil. Often washing with boiling water any hives or implements that might contain disease. Whenever strictly followed, this has affected a cure."—C. Wilcox, Emery Co., Utah.

Pickled Brood.

Some seasons pickled brood is quite bad among bees, and in a few cases I have known it to reduce large colonies, even large apiaries, to doubtful hopes, but those same colonies, after I gave them treatment, were in a month free from disease. Sometimes it takes as careful handling as if foul brood. I do not believe it is contagious, for all I have seen 60 colonies in one apiary badly reduced by it. As an experiment, one of my out-apiaries had 50 colonies at one time with pickled brood. I treated them, and all were soon free from dead brood. At the same time I took ten of the worst brood-combs, where at least two-thirds of the brood were dead, and placed these combs in other strong, healthy colonies. They at once cleaned out the dead brood, and reared as nice brook as one could ask for.

Symptoms.

The larval bees (in last of May and through June) show light brown spots; a little later the cappings have small holes in—the cappings are not shrunken or dark colored, as in foul brood. The dead bee will be first swollen, with a black head dried to a hard bunch, and often turned up—Chinaman-shoe-like. The skin of the dead bee is quite tough, and, if punctured, the thin, watery fluid of the body will flow as freely as water, often a little yellow or brownish colored from the dissolved pollen from the abdomen of the bee. It has very little or no smell; does not at any time stick to the walls of the comb; is easily pulled out of the cell; is never ropy or sticky, and, if the colony is properly cared for, the bees will take care of themselves. Plenty of liquid, unsealed honey and pollen near the brood, and hives so protected as to keep the bees and brood comfortable on cold days and nights.

Never put bees on old black brood-combs, or those with dead broods in; better make wax of the combs, and give the bees full sheets of broodcomb foundation.

Treatment.

Keep all colonies strong, with plenty of unsealed honey near the brood, and if hives are properly sheltered, so as to be warm on cold days and nights, there will be little or no pickled brood. If the queen is old, shows signs of weakness by putting several eggs in one brood-cell and nursing several others, so that the brood is patchy, I would kill such a queen, feed the bees a little, and, when queen-cells are started, remove them all and give them a queen and bees, between two of her own brood-combs from a hive where she has lived. I do not think pickled brood is often the fault of the queen, but rather a lack of proper food and heat in the hive. In most cases, a shortage of liquid honey, or moldy pollen, even in hives with plenty of sealed honey in the outer combs. There is a time in spring in Wisconsin, between dandelions and white clover bloom, when there is no honey coming in from flowers, and often cold days and nights, so that the live bees consume the liquid, unsealed honey first, and cluster in a compact body to keep warm; the result often is the larval bee, just changed from the egg to a tender little grub, is either starved, half-fed or chilled, so that it grows slowly, and too often it dies, and then it is we first notice this about the time white clover honey begins to come in. In other parts of the state, where pickled brood appeared, it was from the same cause, and at other dates, which was due to a difference of time of honey bloom.

Wherever I fed daily some honey, or even sugar syrup, and kept the hive warm, all dead brood soon disappeared while in the same apiaries other colonies affected and not so treated, continued for some time, but got rid of it as soon as treated.

Strong colonies of bees in the fall, with a young laying queen, and an abundance of good honey, sealed or capped by the bees, if properly cared for during winter, whether in the cellar or in chaff hives, wintered out of doors in sheltered location, seldom have pickled brood, chilled or other dead brood, or dysentery, and are the colonies that give their owner profit.

Black Brood.

Black brood is another fatal and contagious disease among bees, affecting the old bees as well as the brood. In 1898, 1899 and 1900, it destroyed several apiaries in New York. Last year I found one case of it in Wisconsin, which was quickly disposed of. Dr. Howard made more than a thousand microscopic examinations, and found it to be a distinct form of bacteria. It is most active in sealed brood. The bees affected continue to grow until they reach the pupa stage, then turn black and die. At this stage there is a sour smell. No decomposition from putrefactive germs in pickled brood. In black brood the dark and rotten mass in time breaks down and settles to lower side-walls of the cell; is of a watery, granulated, syrupy fluid, jelly-like; is not ropy or sticky, as in full brood, and has a peculiar smell, resembling sour, rotten apples. Not even a house fly will set a foot upon it.

Treatment.

Best time is during a honey-flow, and the modified McEvoy plan, much as I have treated foul brood, by caging the queen five days, remove the foundation starters and giving full sheets, keeping que n caged five days longer. As great care should be taken of diseased hives, combs, honey, etc., as in foul brood.

Dysentery.

Dysentery among bees in Wisconsin in the spring of the year is often quite serious. Many colonies die with it. Dysentery is the excrements of the old bees; it is of brownish color, quite sticky, and very disagreeable smelling, and is sometimes mistaken for foul brood.

Causes.

1. Bees confined too long in the hives, so that they can no longer withhold their excrements, and are compelled to void the same on the other bees and combs.

2. Poor winter stores, gathered in the fall from honey-dew, cider mills, sorghum mills, rotten fruit; also some kinds of fall flowers.

3. Old and especially moldy pollen or bee-bread.

4. Hives too cold or damp. If moisture from the breath of the bees is not carried out of the hive by some means, such as through a deep cushion of some kind over the bees that will absorb moisture and at the same time retain the heat, or by some means of ventilation, so that all is dry and comfortable. If mold forms on the combs or cellar is so damp as to form mold, there is great danger the bees will have dysentery and die.

Treatment.

1. First of all, have an abundance of combs of sealed clover or basswood honey in brood-frames carefully saved, and see that each colony is wintered on such food. Three or four such combs will winter a fair colony safely, if confined on those combs late in the fall, and the hive contracted to fit the same. This is one of the most important conditions for success in wintering.

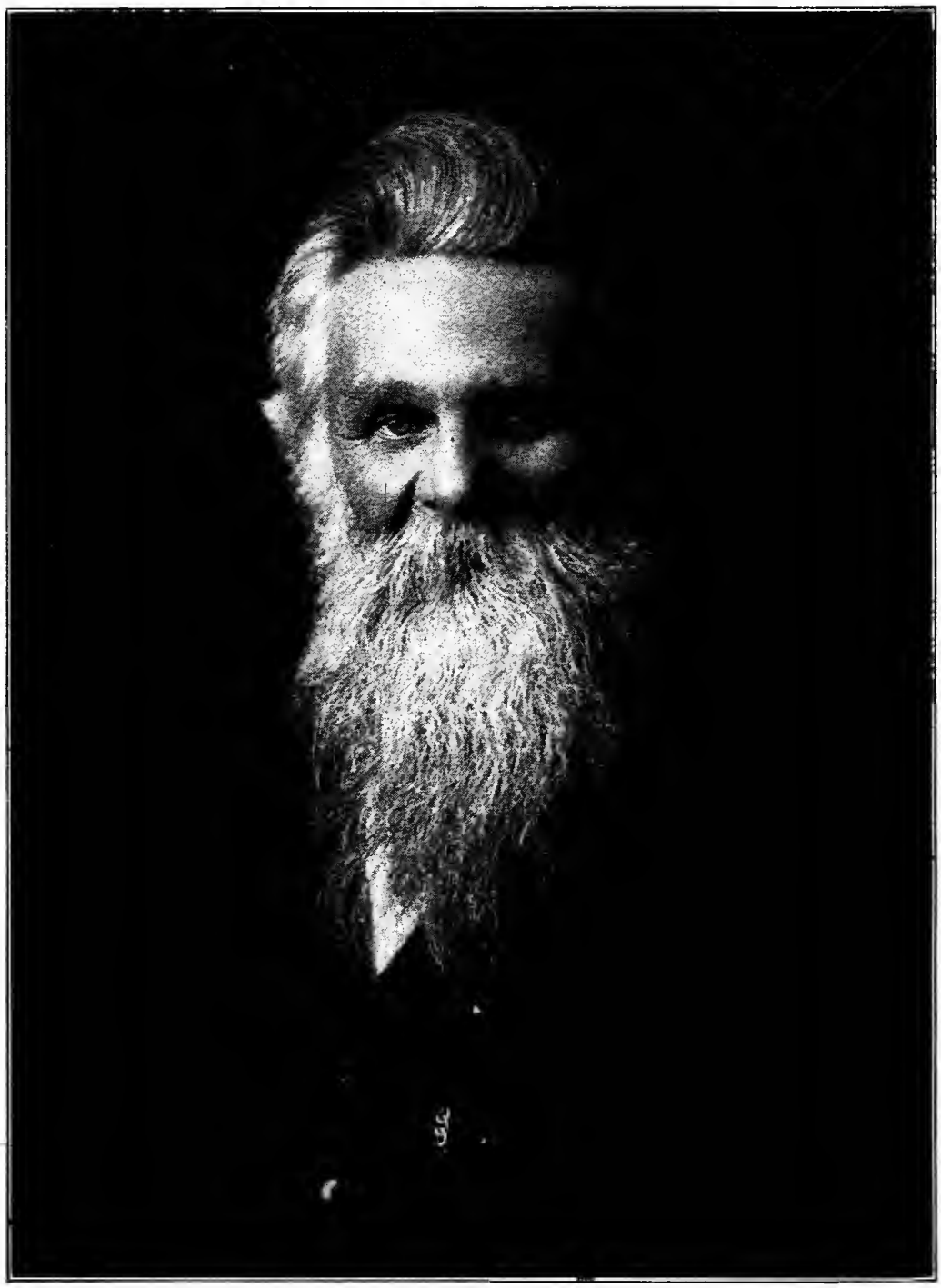
2. If in the fall the bees have gathered this unwholesome honey from the above named sources, it should all be extracted and either exchanged for those honey-combs, or feed the bees good honey or sugar syrup until winter stores are secured. This should be done before cold weather in the fall.

3. Hives contracted and made comfortable, whether in cellar or outdoors.

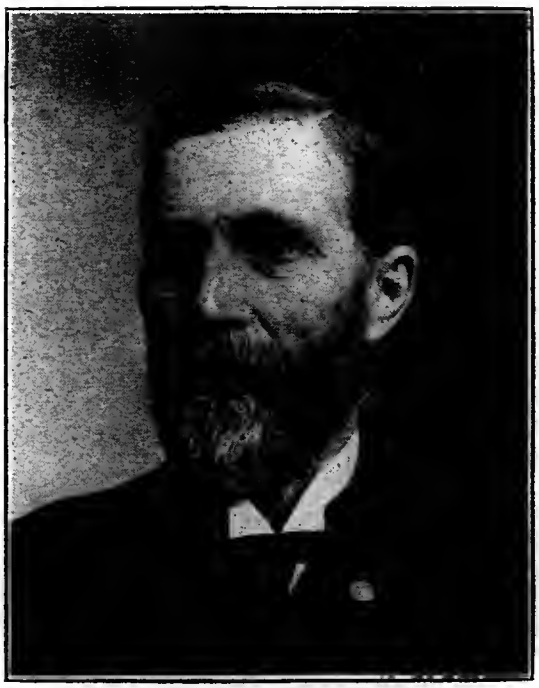
4. If wintered in chaff hives outdoors, with feed as above directed, and there come one or two warm spells during winter, so that the bees can have a cleansing flight, they will not have dysentery or dead brood, and will be much stronger when clover opens.

If wintered in the cellar, the bees will not need so much honey, and if the winters are generally long, with doubtful warm spells, the cellar will be best. But to keep the bees from dysentery, so often fatal to cellar-wintered bees, they should have such winter stores as above spoken of, then the cellar kept at a medium temperature, about 32 deg. F., ventilated so the air is fresh, and no mold will form in the cellar. Fresh air-slaked lime on the bottom of the cellar may help, if it is damp or has poor air.

5. Dysentery will not appear if bees are kept on sugar syrup, or best grade white clover or basswood honey, and are in a dry place, either sheltered by cellar or chaff-hive.



E. J. BAXTER, President.



JAMES A. STONE, Secretary.

PROCEEDINGS

—OF THE—

Twenty-Third Annual Session

—OF THE—

Illinois State Bee-Keepers' Association

November 5 and 6, 1913,

AT THE STATE HOUSE.

The 23d Annual Meeting of the Illinois State Bee-Keepers' Association was held in the State House at Springfield, Illinois, November 5 and 6, 1913.

The meeting was called to order by the President, E. J. Baxter, at 10 a. m., November 5.

Mr. Stone—Mr. President, Ladies and Gentlemen: I do not believe in entering into anything upon which we cannot ask the blessing of the Lord. We are dependent upon Him for everything, and there is no one more dependent than the bee-keepers, for the bright sunshine that gives us the honey crop such as we have had this year.

I have the pleasure of introducing to you the Rev. E. S. Combs, of the Douglas Avenue Methodist church, who will open the meeting with prayer.

Rev. E. S. Combs offered the prayer, as follows:

"We thank Thee, Lord, that Thou hast given to us the many great things of this world whereby we are made glad, and Thou has given to us the necessities of life as well as those things that come from a higher source, the spiritual. So we come here this morning to invoke Thy richest blessings on these men who are engaged in one of the great enterprises of the world—the keeping of the little bee; though small, it is mighty; it does a great work and goes about very busily, all the day long, extracting of the great beauties of nature that which is sweet; and, oh, God, may we learn from him a lesson—to be very busy about those things that the Lord has interested us in here in this world, and, as we meet with humanity from time to time, help us to be as thoughtful, as the little bee, to extract from life the sweet and pure rather than the bitter and impure. Be with these people, these officers and this body in their executive matters. Be with them in their deliberations, and bless their interests, and guide them, in the name of our Lord and Master, for Christ's sake, Amen."

President Baxter—We will now have the minutes of the last meeting:

Mr. Stone (Secretary)—The meeting of the Illinois State Bee-Keepers' Association was held at the State House October 30th and 31st, at 10 a. m., President Dadant occupying the chair. Minutes of the previous meeting were read and approved. The President gave a short address, and in it stated that bee-keeping was at a lower ebb last April and May than it had been for years; and he spoke of the favorable conditions now prevailing. The Secretary's report was read, accepted and placed on file. The President named on the Auditing Committee, Messrs. Moore, Kildow and Stumm, and on the Resolution Committee, Messrs. Baxter, Roberts and H. C. Dadant. On motion of Mr. Moore the Executive Committee was made the Legislative Committee, with power to call any member of the Association to their aid. The Secretary asked what should be done when a member sent in only a dollar for membership fee. After quite a discussion it was decided by the President that a member had a right to join only the State Association if he so chose, and as the Constitution, Article III., Section 1, says the fee shall be $1.00, we cannot debar any one who offers the same as his fee.

Mr. Becker made a motion that the chair appoint a committee of five with himself (the President) as chairman, to wait on the Governor and express our thanks for the efforts he has made in behalf of the bee-keepers of Illinois in securing their Foul Brood law. The following was such committee: Messrs.

Dadant, chairman; Stone, Kildow, Baxter, Moore and Becker.

Mr. Kildow asked if it were not best to have the Question Box started, and the President appointed him to conduct the same. The Convention took a recess long enough to go to the north front of the State House to have a picture taken.

Adjourned until 7:30 this evening (October 30).

Meeting convened at 7:30 for an evening session. Called to order by the President.

At 10 p. m. the Convention adjourned after as good a session as we have ever had, even in the daytime. Mr. France made an excellent talk and brought out discussions of great value to all present. Convention called to order by the President at 9 a. m., the second day (October 31). Inspector A. L. Kildow made his report, which report was a good one and was adopted unanimously.

The Committee on Resolutions reported one resolution that was adopted recommending that the State University create and conduct an Apiarian Department at the University of Illinois. Secretary Tyrrell, of the National, made a talk good enough to convince any one that membership in the National was not only desirable but much needed. Mr. Baxter offered a resolution to go to the State Board of Agriculture and ask for an appropriation to increase the amount of the premiums offered at the State Fair, making a first, second, third and fourth premium on all the premiums now offered. Resolution was unanimously adopted.

Convention proceeded to the election of officers. Mr. Dadant remarked that, as he had become editor of the American Bee Journal and was a keeper of supplies, he thought it best for him not to accept the office of President. Mr. Baxter was nominated as President and the Secretary instructed to cast the ballot for him for President for the ensuing year.

Convention proceeded to ballot for Vice-Presidents, with the following result: First, Mr. Moore; second, Mr. Duby; third, Mr. Coppin; fourth, Mr. Withrow; fifth, Mr. Pyles.

The President was instructed to cast the ballot for Mr. Stone for Secretary.

The Secretary was instructed to cast the ballot for Mr. Charles Becker, for Treasurer.

The Secretary was instructed to cast the ballot for Mr. C. P. Dadant, for delegate to the National Convention, to meet at Cincinnati in February, 1913.

Mr. Baxter was appointed alternate delegate to the National Convention. The date for the next annual meeting caused a good deal of discussion and it was finally voted to leave it to the Executive Committee, which decided on the 5th and 6th of next November ,1913.

The Secretary made a motion that four premiums be awarded of $5.00, $4.00, $3.00 and $2.00, for first, second, third and fourth best papers to be written and read by the writers, and no arguments to follow them, other than the decision upon same, to be by vote of the members. Motion amended that the limit be 500 words. Motion carried.

Time of next meeting was set by the Executive Committee for November 5 and 6, 1913. Convention adjourned at 12:30, sine die.

Mr. President—You have heard the minutes read. What will you do with them?

Mr. Moore—I make a motion that they be approved.

Motion seconded and carried.

Mr. Stone—The Secretary will have to call for the President's address:

President Baxter—Ladies and Gentlemen: The President's address, the President forgot all about. I have been so busy that I never gave it a thought. I have been more busy the past year than ever in my life, and I could not attend to things as I should have, but, nevertheless, I will say that bee-keeping has made some progress within the past year all over the United States. A number of states have passed foul brood laws and others have improved on the foul brood laws they had previously. Increased appropriations have been made. Our state has had an increase of $500.00. Conditions as a rule have been favorable. Bees as a rule wintered well and came out this spring in good condition, and in many localities, notwithstanding the drouth, the yield has been quite generous and of a good grade of honey, too, and prices have been very satisfactory—so that the bee-keepers have reason to rejoice.

Bee-keeping as a vocation has had an incentive in many localities. Massachusetts has added it to its course of study in her college; Minnesota has also added a course in bee-keeping, and Illinois is about to do the same. I see that they are going to give instruction in bee-keeping there this coming year. They have not added it as a regular course of study, but will do so later on, so Professor James told me.

Take it all in all I think bee-keeping is forging ahead to a great extent. It is strange to me, when you consider the amount of profit to be made out of bee-keeping, for the small amount of capital invested, that the Agricultural Colleges as a rule have not taken this up long ago and made it a part of their course of studies in the colleges, so as to give the young men, and the young women, who are studying agriculture, a chance to follow it as a vocation, or use it as a side line in beginning their farming career, because I know of no way that they can increase their capi-

tal so fast and get a start in life so easily as by beginning bee-keeping.

Of course I know it is generally the way of the world, when anyone is following a special vocation, not to try to induce others to engage in that vocation, to compete with them, but I notice, in the conventions I attend, that bee-keepers are generous, in that they are always ready to give all the information they can to those desirous of receiving it, although later on they may have competitors in the sale of the honey product, but it shows that bee-keepers as a class are ready to give out this knowledge.

I do not know that I can add anything more. If I had thought upon the subject possibly I could enlarge upon it to a greater extent.

President Baxter—We will have the Secretary's report:

Secretary's Report for 1913.

Mr. Stone—For two years preceding last year the honey crop was smaller and it was reasonable to expect a falling off in our membership. This year the honey crop of the state has been fairly good the state over, and the quality of honey has been good. We have heard of no dark honey from any part of the state. Our membership this year is as follows:

Members, direct	147
Coming through the Chicago-Northwestern	44
Northern Illinois and Southern Wisconsin	14
Total	205

That is a falling off of a little, over last year.

With more than two hundred members it is surprising to many that we do not have more in attendance at our annual meetings. It is not a lack of interest that is the cause, but the assurance that they will get a copy of the proceedings in the Report, when it is printed. The members fail to realize that they ought to be at the meeting to help make the report what they would be pleased to have it by the answers given to the questions they might propound. So upon the members present depends our next annual report, as well as upon those who attend the meetings of the Chicago-Northwestern and the National.

We thought, when we sent out the notices of this meeting, that it might be a good thing to say—"If you cannot attend, send in your questions," but decided that would not do as they might send in their questions and no one come to answer them.

Of our fifteen charter members, eight are still living and three have kept up their membership; three have ceased to keep bees, and the remaining two, we have lost sight of (Thos. S. Wallace, Clayton, Illinois, and A. N. Draper, Upper Alton).

Since the National Bee-Keepers' Association has been readjusted and gotten into working order, the fee of $1.50 gives our members of the State Association membership in the National, which means also that you receive a copy of the Bee-Keepers' Review for one year, as the Review is run by the National. Also we are asked to let the National know our wants as to what we would sell or buy, whether honey or bee fixtures.

We need badly to have this work done by some one other than the Secretary of our State Association because we have had numerous letters during the past year asking all kinds of information, which piles up our work until we just failed to answer unless the party was a member of the Association or enclosed a stamp for the answer.

We had the same number of reports this year as last—300 cloth-bound and 100 paper covers. And, while there are a good number of the paper covers left, the call for the cloth-bound is on the increase. Several additional libraries ask to be placed on our mailing list each year.

The plan the Secretary adopted several years ago, of sending out blanks for return membership fees and statistics, continues to be the only way to get a large membership, for immediately after they are sent out we have received as many as twenty-one fees in one mail. The Secretary wants to say: Do not be offended if after you pay your fees at this meeting you receive one of these circulars and call it a dun for another fee, and in consequence abuse the Secretary (as has been done); because you are asked to make a statistical report on the other side of the folder.

The resolutions adopted at our last meeting were copied and sent by the Secretary as follows:

The one recommending an Apiarian Department at the University of Illinois was directed to the Directors of the University of Illinois, and no reply was received.

The resolution to the State Board of Agriculture was sent to Secretary Dickirson, which will be reported on by the premium list committee.

The executive committee (those present at the Fair, as was the custom) passed on the badge to be had at this meeting. But, before sending for them, we had a proposition from the American Bee Journal to furnish this badge free, with permission to enclose each badge in their advertising envelope, and we certainly accepted the friendly offer.

The Secretary has collected, during the year, 104 membership fees to the National, or $104.00, which was turned over to the Secretary of the National as fast as received.

For dues to the State Association, we received $101.50, which we turned over to the Treasurer, so that there remains in the hands of the Secretary no money at this date, October 27, 1913.

President Baxter—You have heard the Secretary's report, what will you do with it?

Mr. Moore—I move that the report be received and placed on file and be referred to the Auditing Committee.

Motion seconded and carried, and report so placed.

President Baxter—The next thing in order is the Treasurer's report:

TREASURER'S REPORT.

(Report of Charles Becker, Treasurer of the Illinois State Bee-Keepers' Association.)
From November 1, 1912, to November 4, 1913.

1912	STATE FUND.	Dr.	
Nov. 1.	Balance on hand	$1,035.27	
1912.			
Oct. 31,	Order No. 16—Paid N. E. France		$ 11.00
Oct. 31,	Order No. 17—Paid L. C. Dadant		5.04
Oct. 31,	Order No. 18—Paid E. J. Baxter		6.62
Oct. 31,	Order No. 19—Paid W. B. Moore		5.21
Oct. 31,	Order No. 20—Paid H. S. Duby		6.76
Oct. 31,	Order No. 21—Paid E. B. Tyrrell		18.40
Oct. 31,	Order No. 22—Paid L. M. Stewart		10.00
Oct. 31,	Order No. 23—Paid C. Becker		.78
Oct. 31,	Order No. 24—Paid C. Becker		25.00
Oct. 31,	Order No. 25—Paid L. C. Dadant		20.55
Oct. 31,	Order No. 26—Paid L. M. Stewart		112.50
Oct. 31,	Order No. 27—Paid C. P. Dadant		31.60
Oct. 31,	Order No. 28—Paid L. M. Stewart		95.00
Oct. 31,	Order No. 29—Paid Luty & Whahl		40.00
Oct. 31,	Order No. 30—Paid State Register		318.50
Oct. 31,	Order No. 31—Paid State Register		6.00
Oct. 31,	Order No. 32—Paid W. B. Moore		15.61
Oct. 31,	Order No. 33—Paid Arthur Lee		5.08
Oct. 31,	Order No. 34—Paid W. B. Moore		18.72
Oct. 31,	Order No. 35—Paid G. M. Withrow		3.82
Oct. 31,	Order No. 36—Paid W. B. Moore		21.16
Oct. 31,	Order No. 37—Paid J. A. Stone		80.64
			$ 857.99
	Balance on hand		177.28
			$1,035.27

BALANCE ON HAND IN ASSOCIATION FUND.

1912.	Debit.		
Oct. 21.	To balance on hand	$ 179.44	
Oct. 23.	To check from J. A. Stone	101.50	
		$ 280.94	
	Credit.		
	By J. A. Stone		$ 100.00
	By balance on hand		180.94
			$ 280.94
1913.	**Debit.**		
Nov. 4.	To balance on hand, Association fund		$ 180.94
Nov. 4.	To balance on hand, State fund		177.28
	Total on hand		$ 358.22

Mr. Stone—I move that the Treasurer's report be referred to the Auditing Committee.

President Baxter—I believe it would be best to receive the report and then make a motion later on to refer the Secretary's and Treasurer's reports to an Auditing Committee.

Mr. Stone—I make a motion that the Treasurer's report be received and placed on file.

Motion seconded and carried.

Mr. Stone—I move that we hear from the Treasurer a little further, in regard to the withholding of the funds from the state.

President Baxter—Can you tell us why we have not received the $1,000.00 appropriation?

Mr. Becker—I want to state to the Convention the reason for the showing of such a small balance, $177.00 on hand, is because the appropriation that we were allowed, of $1,000.00, beginning July 1, last, I have not received. I made out my bond and sent it to Mr. Stone and he had an order made out to send to the Auditor here (Springfield) and they wrote me that they could not pay that at the present time owing to a deficiency in the treasury, and probably would not pay it until this year's taxes came in. Our principal expenditures are from now on until spring. Last year I paid out, up to May 1, about $600. I do not know who will be the Treasurer next year, but we have not money enough on hand at the present time even in the Association fund, and not in the general fund, to carry us through until we get this appropriation.

I suggest to our President and Secretary, while we are here, that we go down and see the Auditor and find out when we will probably get this money. Of course we might use the Association fund, but then the Treasurer has no authority to pay any of that money out only for the expense of the Association. Now if you can arrange it so and authorize the Treasurer, whoever he may be, to pay this money out until the other comes in, and then turn it over again into the regular Association fund, we might get along in that way. But this is the reason there is such a small balance; it seems to make a poor showing. I saw in the paper they discovered they were not getting some money so they are only paying the actual expenses of employees and not paying any appropriation.

Pres. Baxter—Ladies and Gentlemen: I suppose you understand the situation. The Legislature at its last meeting appropriated $1,000.00 for the use of the Bee-Keepers' Association, payable the first of July, but we have not been able to get that money; it was not in the treasury. We will have to make some effort before we adjourn to get the money and if it is not to be had at the present time we will have to provide some means of supplying the amount until that money is available. It is good; we will get it some time.

Pres. Baxter—The next thing in order will be the reports of Committees; if there are no Committees to report we will have to defer that until later.

The President is not authorized to appoint Committees until a motion is made to that effect. We will have to have an Auditing Committee and a Committee on Resolutions.

Mr. Pyles—I move that the President be empowered to appoint a Committee on Resolutions, and also an Auditing Committee.

Pres. Baxter—And also we should have a Committee on Legislation; or will that come up later?

Mr. Stone—We will not need such a committee this year, Mr. President.

Pres. Baxter—That is right. Is there a second to the previous motion?

Motion seconded and carried, that the President be empowered to appoint a Committee on Resolutions, and also an Auditing Committee.

Pres. Baxter—On the Auditing Committee I will appoint: Messrs. Moore, Duby and Henry Dadant.

Pres. Baxter—On the Committee on Resolutions I will appoint: Messrs. Pyles, Coppin and King.

Mr. Stone—I have some committees to report.

Pres. Baxter—Are there any outstanding committees?

Mr. Stone—Yes. This resolution (in hand) was mailed to the President of the Board of Directors, and also one to the President of the State University:

Resolution.

Whereas, Bee-keeping scientifically and properly conducted offers one of the easiest and best means of making a good amount of money with a small amount of capital; and

Whereas, Many of the young women

and young men attending the Agricultural College in the State University at Urbana with a view of engaging in general agriculture or fruit growing have little or no capital with which to start in their chosen avocations; and

Whereas, A knowledge of practical bee-keeping would greatly assist them in acquiring that needed capital and the keeping of bees aid them in the profitable development of their crops without hindering them in the pursuit of their labors; and

Whereas, Quite a number of states have already established a department of Apiculture in their state universities, greatly to the benefit of said states, wherein practical bee-keeping is taught, bee diseases studied, preventions and remedies for the same devised, and the inspection of the apiaries of the said states undertaken for the purpose of detecting the existence of the diseases, the prevention of the spread of the same and the cure and eradication of the diseases from the state; therefore, be it

Resolved, By the Bee-Keepers of the State of Illinois in convention assembled in Springfield this 31st day of October, 1912, that we most earnestly request and urge the Board of Trustees of the State University and the management of said University to establish an Apiarian Department in the Agricultural College at the University, with a good practical, successful bee-keeper at its head, for the purpose of teaching practical bee-keeping to such of the students as desire to learn the same, to study the various bee diseases, make experiments in the prevention and cure of the same, and to do everything possible that will encourage and advance practical and profitable bee-keeping within the state.

Mr. Stone—I will say right here that the Secretary forwarded a copy of these resolutions to the Trustees of the University and never received an answer from them.

Pres. Baxter—I went there personally, to see the officers, and I saw the president, Mr. James, and our Entomologist. Our Entomologist told me he had asked for an appropriation to institute a course of study of bee-keeping in the State University and he thought we could get it. He said that as to the other part—with reference to the inspection work for the detecting of the existence of the bee-diseases and their eradication, etc.—they did not think it necessary that they should undertake this work; that the Department of Apiculture in Washington were working along this line and it was useless for the University to take this up; he said that they would never take this up—that they didn't want to do any police work in the state and would rather we would do it ourselves; that is what the entomologist told me.

What we want them to do is to teach practical bee-keeping, and I told him we would be satisfied with that.

Mr. Stone—The "Premium" Committee have a report to make, which I will give, as chairman.

The following resolution was unanimously adopted at the last meeting of the Illinois State Bee-Keepers' Association:

Resolution.

Whereas, The great State of Illinois, with its matchless resources, is appropriating less money for Apiarian Exhibits at its State Fair than surrounding states with much less wealth; and

Whereas, An extensive and well selected and well arranged exhibit of Honey, Bees, and Apiarian tools and supplies is one of the most interesting and the best patronized repartments at the State Fair by the general public; and

Whereas, Such an exhibit is of great educational advantage and a means of encouraging the pursuit of bee-keeping within the State which could add thousands of dollars to its wealth; therefore be it

Resolved, By the bee-keepers of the State of Illinois, in Convention assembled at Springfield this 31st day of October, 1912, that we ask the State Board of Agriculture to appropriate a sum, for premium on Apiarian Exhibits, commensurate with the greatness of the State, and somewhere equalling the sums appropriated by the States of Minnesota and Wisconsin; be it further

Resolved, That we ask the State Fair management to offer a first, second, third and fourth premium on every article for which a premium is offered, excepting handling bees in cages, and that we ask that at least two premiums be offered for it, viz.: a first and second.

Mr. Stone—A copy of this resolution was sent to the Secretary of the State Board, and we received the following reply:

Springfield, Ill., Feb. 18, 1913.

James A. Stone, Secretary Illinois Bee-Keepers' Association, Springfield, Ill.

Dear Sir:—

You have sent this office a copy of the resolution adopted at the 1912 annual meeting of your Association, asking for a larger offering of premiums for apiarian exhibits at the Illinois State Fair. This will be referred to Mr. Davis, superintendent of the department in which these exhibits are shown, and the recommendation will be presented to the board at their spring meeting, when the classification of premiums for 1912 will be adopted. The date for this meeting has not yet been set. Thanking you for your interest in the matter, I am

Very truly yours,

J. K. DICKIRSON,

Secretary.

Mr. Stone—It is well to state here that the Secretary forwarded a copy

of Resolution to the Trustees of the University and never received an answer from them at all. We were surprised when the President told us what they did about taking it up.

Pres. Baxter—I will repeat what I said as others have come in: I went there personally to see the officers and I saw the officers. I saw the President, Mr. James, and our entomologist; the entomologist tells me he has asked for an appropriation to institute a course in the study of bee-keeping in the University and he thought we could get it. He told me, as to the investigation of Bee Diseases, that the University did not think it necessary to undertake it as the Department of Agriculture in Washington were working along that line, and that it was useless for them to take it up. He told me the Inspection Department of the University would never take it up; that they did not want to do any police work in the state, was the way he expressed it, and would rather we would do it ourselves. That is what the entomologist told us, and Mr. James.

What we want them to do is to teach practical bee-keeping, and I told them we would be satisfied with that.

I will state that I will allow this report to go in the Minutes because I think it is useful; I think this subject ought to be kept before the people.

Mr. Stone—The premium list committee have a report, which I will make as chairman of the committee.

Mr. Stone—They added all the premiums we asked them to, except a fourth on Display of Comb Honey, and we think that omission was not intended.

Mr. Stone—I move that the Chair be authorized to appoint a Premium List Committee.

Motion seconded and carried. The Chair appointed Stone, Becker and Coppin.

Mr. Stone—I have no written report of the Legislative Committee; I will give a verbal report.

The Legislative Committee was authorized to call any one whom they saw fit to assist them. I came in to Springfield and had a bill offered in the Senate, introduced by Mr. Compton of your district, Mr. Chairman; the House Bill was No. 144; we had that introduced by Mr. Pervier and the House was so late in organizing that they instructed us to use our influence to get the bill through the Senate first and then let it come to the House; so we worked that way all the time. When it came to the Appropriation Committee in the House it was a joint meeting of the House and Senate committees; they only met at night, and I sent a wire to Mr. Kildow to meet me "tomorrow night at 8:00 o'clock;" Mr. Kildow was not at home, but he got here. I met Mr. Kildow on the street a few minutes after eight o'clock; the chairmen of both houses had assured us if we would meet them and tell them what we wanted that would be all that was necessary; the chairman of the Appropriation Committee of the House said that all we needed to do was to notify them; I was afraid to risk that. Mr. Kildow was here, and we had our meeting, and they gave us what we asked, $2,000, and we didn't have a bit of trouble; and I want to say to the meeting, that after this we will only have to present our bill and they will put it through without any trouble or it will be vastly different from what it was this time.

Pres. Baxter—I will add: You remember when you wrote to me you said you didn't think you would get more than $1,500, and I said I thought you would get $2,000; I have seen an awakening among the people as a rule throughout the state, and I think we will have no trouble whatever after this in getting our appropriation; and I further think we will get an increase if necessary.

Mr. Stone—I make a motion that we prepare a question box and that some one be appointed to preside over it; (in the meantime we can write questions).

Motion seconded and carried.

Pres. Baxter—I appoint Mr. Kildow to preside over the question box.

Pres. Baxter—I would like to ask: Who have prepared papers to read here, to compete for the prizes that have been offered?

(No papers presented.)

Mr. Pyles—As chairman of the Committee on Resolutions, I wish to call your attention to the fact that some things may come under your observation that this committee will not have access to. If there is any resolution you wish to present, feel at liberty to present such resolutions, or at least such ideas as you wish to convey.

Pres. Baxter—What is the pleasure of the Convention? We will take up

the Question Box if there are any questions ready.

Mr. Stone—I move that we take a short recess for the sake of getting acquainted, to give us an opportunity to pay dues, and to give out the badges.

Motion seconded and carried, and a recess of ten minutes had.

Meeting called to order by President.

Mr. Duby—It has been suggested we might adjourn until afternoon, but I want to ask a question or two.

In the first place, I understand it is within the power of this Association to do certain things, especially in regard to finance. Down our way we are going to have a convention. We would like to have members of the Illinois State Association join us; I understand that Mr. Pyles and Mr. Kildow would be willing to come if it were not for the question of expense. Our convention down in Eastern Illinois is more of an amateur convention than anything else. Here we have a convention mostly one of business; down our way we eliminate all these things of a business nature and our meetings are more in the nature of a social gathering, to instruct whoever comes with reference to bees and bee-keeping, and it is beneficial to every one who attends. Many come there who practically do not know the A B C's in beedom, and many more would come if they knew that there would be present some good authorities among bee men, and that they might have any question that they might ask answered intelligently.

I have been corresponding with some of our members and told them that I was coming over here and I would use my influence in getting one or two good men to come down there to our convention; and if we could have a couple of good men from this Association it would be a drawing card. Mr. Pyles and Mr. Kildow would like to come if it were not for the expense. Is it not within the power of this Association to reimburse one or two or these men who are willing to come down and help us a little?

We are all interested in the question of bee culture and would like to see these different conventions a success. As a matter of fact bee-keepers are largely a set of men without jealousy; what is good for one is good for all; we want and wish success to everybody.

Would it not be good policy for this matter to be taken up by this Association, and see whether or not the expense of one or two good men could be paid by this Association, that they might attend the Eastern Illinois Convention; you will find that what is good for men in that part of the country is good for men in all parts of the State. We have been working there for some years in Eastern Illinois and in Western Indiana; and we have had gatherings that would make this gathering blush; I mean, they are so much better in point of attendance. We mean to keep it up, and why should we not?

I wonder if this question could not be taken up, and argued more or less, and some ways or means be found whereby this Association could stand the expense of having one or two men visit the Eastern Illinois Convention. These men could induce others to become interested in bee culture, and it would be profitable to everybody. Our meetings are good; we have been holding meetings there for the last three years; this last year we had people come over 100 miles to attend the meeting, and expressed themselves as being well satisfied with coming over there, and some made promises that they would come next year if we had a meeting. We are trying to do our part in that part of the country to educate bee-keepers, and, if we carry on this work over there, it is only a question of time when similar work in different parts of the State will be taken up. I think Illinois is way behind Massachusetts and New Jersey and the Eastern States; they have field days there in many places and get along fine. We cannot we have gatherings here and there more often? We have only one in Springfield; one in Northern Illinois and one in Eastern Illinois. There are thousands of bee-keepers and all they want is an opportunity of getting together.

Mr. Chairman, I submit to you this question, and if you think it is worth arguing, to find some way of sending some men to help us out. We have foul brood and are trying to eradicate it.

We have a class of young men who are trying to push things, and I think they will make a success if we only give them a chance; and I think we ought to do all we possibly can to help

them; and this may be the means of having something done in other parts of the State.

Pres. Baxter—I would suggest that you leave this question for the Executive Committee to investigate; they will know what power they have to act in the matter; the committee can report either this afternoon or tomorrow morning, and the Society can take it up for further action; I believe that will be best.

Pres. Baxter—Now, what is the pleasure of the Convention? I think it would be well to adjourn until some time this afternoon, at one or one-thirty, to suit your pleasure.

Motion made to adjourn until 1:30 —seconded and carried.

FIRST DAY—AFTERNOON SESSION.

The convention was called to order by Pres. Baxter at 1:30 p. m.

Pres. Baxter—The first thing on the program this afternoon is the Question Box.

Question—For wintering, should hive covers be left sealed down? Should hive covers be left sealed for wintering inside? Should the entrance be left open?

Pres. Baxter—The question is—Should covers be left sealed for winter? Who will answer that questiion? Mr. Kildow, what is your experience?

Mr. Kildow—I leave my covers off, those that I take down cellar. I don't know but probably my covers are different from the covers that this man uses; my covers are rather a telescoped cover; that is, they set over the hive. I always have good ventilation.

Pres. Baxter—The gist of the question is this: Should the cover be left sealed so that there is no ventilation through the hive?

Mr. Kildow—I would say, no, they should not be; you must have good ventilation.

Pres. Baxter—You have had experience both ways, have you?

Mr. Kildow—I have always had ventilation.

Mr. Moore—I winter in the cellar altogether; I use a metal roof cover that is shallow telescoping cover with thin super underneath; when I move the hives in the cellar I take the outer cover off and put the hives in the cellar. I have wintered out of doors using burlap over the super full of dried leaves and had good success with that but I think the general trend of opinion amongst the bee-keepers of today is to let the bees seal the cover tight on the hive and then put your winter protection around the entire hive and over the cover; that conserves the heat of the cluster. There is no upward ventilation but I think they claim it protects the top and side of the hive so that the moisture from the bees will form a current and come out at the entrance and will not freeze and make the hive a heavy mass of ice.

Pres. Baxter—Do you winter outside under those conditions?

Mr. Moore—This is not from personal experience, it is from what I have read; I winter in the cellar; but, if I were going to winter outside, that is the way I would do it.

Mr. Duby—I winter both inside and outside, and I never bother with covers. I thought, from articles printed in the papers, it would be a fine thing to do and I tried it and failed; whenever I winter in the cellar, I carry the hives in as they are; give them a wide entrance, that is all.

Pres. Baxter—This question applies to wintering outside—

Mr. Duby—The question was—Should the cover be left sealed. For outside wintering, I use a different kind of cover; I have a telescope cover; and I wrap the hives with rough paper nailed all around. I used to put on supers and do all that kind of trash; I have given that up; last year my loss was less than 3 per cent; I never had a winter when my bees did so fine nor when I did so little work about wintering.

Pres. Baxter—Conditions alter cases. Any one else care to answer this question?

Mr. Pyles—My experience in wintering outside is much the same as that of Mr. Kildow; we use chaff. The sealing down process is all right for people to talk about. Root's got enthusiastic about having sealed covers a few years ago; about a year ago they had winter losses by not having ventilation. There are some things we understand and some we do not, and one of these is, like conditions do not produce like results.

I have sectional hives, with 3-8 inch bee space in front; that is the entrance I mean; a year ago last winter—I pried up this hive from the bottom board and put a 2-inch block under that, put

in plenty of leaves and had an abundance of ventilation in the summer time during the honey flow; before winter I left those hives down so that I had a 3-8-inch entrance in front; I put on burlap two or three thicknesses, and a little telescope cover on top, of the hive; bore a hole in each end of the cover. For some reason or other, two years ago I missed a hive; I let it stay up on that 2-inch block, with entrance 2 inches across the front; you remember that a good many bees died a year ago last winter. When I went around in the spring, wherever I found bees that were dead I shook them out and shut up the entrance so that nothing could destroy the combs. I came to this hive, and I said—"This is dead, there is no use bothering with this one," but I found there was a roaring sound; I turned up the oil cloth, and found I had the strongest colony of bees. There are a good many things I don't understand, and this is one of them.

Pres. Baxter—You had plenty of ventilation below; Mr. Dadant, what is your experience?

Mr. Dadant (H. C.)—The main thing is to have plenty of ventilation and not to have anything sealed directly over the bees; any one knows that any one using oil cloth or anything similar, making a sealed tight cover, will have more losses than to have plenty of absorbent material above; Mr. Pyles and Mr. Kildow suggest using a sack over the bees. We use a straw mat made out of slough grass and tack forest leaves inside the capping; have a 3-8-inch entrance; about 4 inches in length, which makes practically 2 square inches of opening, and packing in that manner, with leaves on the outside (a great many of you know how we pack our bees) we have a small percentage of winter losses.

I have not had personal experience in other ways but have had a good many of these things handed down and past experience would lead me not to use any other method. The main thing is to have plenty of absorbent material above the bees and some ventilation, without draft; you want ventilation, but no draft.

Pres. Baxter—The leaves prevent the draft. I can say a little on this subject. I have been wintering bees for thirty-seven years, hundreds of them, and my losses in 1884 and 1885—you will remember the terrible winter—were only among those that were not packed according to my method, or the Dadant method, rather. Those that had the sealed covers, out of sixty hives, we lost all but 12. Where the sealed cover was taken off and replaced by a mat and capping filled with leaves, I didn't lose 5 per cent.

Year before last I had an apiary six miles east of town, of 80 colonies. I went out to pack the bees with a big load of leaves and I had mats for all my colonies, but when I got through with my load of leaves I found I had twelve unpacked with leaves. I was short 11 mats; I took the cloth off of one and put a mat over that one colony and left the other eleven with sealed covers. In the spring those 11 were all dead. That one with the mat on top the frame was alive and nearly all those that were packed with leaves were alive, but the eleven that had no leaves, and sealed covers, were all gone.

Now I opened the hives in the winter of 1884 and 5 that were sealed down. I didn't believe in that way, but, because I was foolish enough to accept a school that fall, I made a contract with a man to pack and he didn't come and some of my apiaries were not packed. I examined my hives in the middle of winter and found a sheet of ice all over the honey. The bees absolutely starved to death because they could not get at the stores; those that were packed with leaves were dry and nice as could be and could get at the stores at any time. I put a little piece of wood about as thick as my finger across the frames and a mat over that. There was a space there so that when the bees came to the top they could go over from one frame to another and could get at their stores in cold weather. If you have a good colony of bees and good honey, you ought not to lose more than from 2 to 3 per cent in wintering.

Mr. Stone—I did not listen to all that has been said because I thought I would have to go over all this in reading the proof and the like of that; but I want to say that I have been wintering out of doors for ten years; I used to winter in the cellar altogether; I do not believe it is necessary in this climate. I lost 80 per cent of my bees and the ones that were saved

did not have any mats on; it was my mistake in leaving off the mats. For fear of a want of honey I left the case of extracting frames on the light ones and they all came through all right, while those not having all this dead air space above all died, and plenty of honey outside of the clusters. Those with all the dead air space they wanted got through all right.

Should the entrance blocks be left off, or on?

Pres. Baxter—He refers to blocks that raise up the hives.

Mr. Moore—It should be for outdoor wintering.

Pres. Baxter—Who else will answer that question?

Mr. Kildow—I will say for my part I have not seen any difference from leaving it off or on; part of mine are off and part are on.

Mr. Stone—I have known bees to winter with the whole bottom exposed.

Pres. Baxter—Different hives have different widths of entrance.

Mr. Kildow—Some of mine have 3-8-inch to 3-4-inch clear across the hive.

Mr. Stone—They are talking about where the entrance is clear across the hive; that is what it means.

Mr. Kildow—The question says—Should the entrance blocks be left on or off?

Mr. Stone—They mean to ask, what size space should be there.

Mr. Pyles—It looks to me as though the question were gotten up all wrong. Should the entrance blocks be left on or off? They should be taken off during the summer time and put on in the winter time; when an early spring, left on.

Mr. Stone—I believe that, the bigger space you give, the less chance you will have for this moisture that occurs in the hive. If you left the whole bottom open I don't believe there would ever be any ice in there; I believe it is caused by being stopped up so tight; they get hot in there and it is cold outside and this causes the moisture to accumulate. This winter I have thought about putting a feeder on top the frames and fill that with honey; put an oil cloth over so that it would not come clear to the edges and fill in with leaves. I feed with liquid honey.

Mr. H. C. Dadant—Moisture from bees comes from the breath more than heat and cold that Mr. Stone speaks about; heat comes from the breath, just like from a human person, and will form underneath the oil cloth; I have seen that happen where we left the oil cloth on just a single colony, and it will happen every time unless they have frequent flights. By all means remove anything that tends to form a sealed cover. So far as the entrance is concerned I think 2 square inches is plenty; more will not do any damage, but, where colonies are exposed to strong winds, they should have from two to three square inches. I have seen colonies winter successfully under adverse conditions; there are exceptions to all rules, but where you work with several hundred colonies for several years you can eliminate those exceptions.

Mr. Duby—I think we have all had experiences. I have seen hives covered up with snow and you could not tell where the hives were; I have left them like that for several days. I have read that snow will not hurt bees, especially when it is light. When the snow melted I was careful that no ice formed at the entrance. I don't believe any one ever found sweating at the entrance; ot a drop of water would be seen on the lining. Now this proves that under certain conditions with a certain temperature the bees will not sweat at all. They would scatter in the hives so much that they would not sweat; but they will sweat on cold nights when the cold comes in all of a sudden. The bees will cluster and don't have time to spread before the cold starts out so you will then see water coming out of the entrance.

I have tried it for two years not using anything but common roofing paper; simply wrapping the hive the same as you would wrap a bundle or box of any kind; cut it almost square and tack it around, and you very seldom see water coming out of the entrance any time of the day or night; because the cold will not penetrate as quickly as it would any other way, and we never use chaff or anything of the kind; we take the hives as they are on the stands and never bother with a cover; wrap them with roofing paper that protects the hives, and it is very seldom you see water coming out even on a cold day.

Pres. Baxter—In my experience of 36 years, I am willing to stake my reputation as an observing bee-keeper on the fact that bees do sweat every day in

the year when the temperature is so that they can. I am willing to say that every day during the winter time there is a certain quantity of moisture formed with those bees, and if there is no upward ventilation so that this moisture can escape any way in steam it is bound to condense inside the hive and will settle on the combs and freeze there and make a coat of ice. If your hives are like mine, double walled, air tight, so that no moisture can escape, if you don't take off the sealed cloth from the top and put something on there—a gunny sack, a straw mat or something so that the moisture can get through there and escape, you are bound to have wet colonies. I have seen those that were sealed down tight and have seen the water run down the front in the winter time, and those that were packed so that the moisture could escape, no water would come out.

As to this front opening, I don't care whether it is two inches or four inches or the whole width of the hive, provided there is not too much space for the wind to get through so there is too much draft. By having a straw mat on top—I use a slough grass mat and six inches of leaves, tacked pretty tight in the cap, and there is not then much danger of having a draft, although I prefer to have the space regulated according to the strength of the colony; the smaller colony I have it contracted, but with a larger colony, leave it open full width.

I have seen the leaves up in the capping, where I did not have a hole in the end for the steam to escape, so wet in the middle of winter when feeding you could wring water out of those leaves, and where did it come from if not from perspiration of those bees? The secret of wintering is to have upward ventilation, and an absorbent above to absorb the moisture or let it escape, and you will have no trouble.

Mr. Duby—I hate to believe I have a different strain of bees than you have but the result with me is not the same.

Pres. Baxter—Maybe the conditions are different.

Mr. Duby—I use nothing but single walled hives.

Pres. Baxter—That is where the secret comes in.

Mr. Duby—You better buy my hive then.

Pres. Baxter—Mine are air tight, you might say.

Mr. Duby—The cause of this sweating—the bees cluster together and those inside will get too warm; bringing your bees in a condition where they will not have to cluster so much then you have the whole thing; the bees on the outside will not sweat, but those on the inside will sweat. You take it right here for instance, the people right next the door will not sweat, but those way in the inside will; you take a big cluster in the summer time on a limb, they will not sweat; they have a big hole in the center of the cluster, and they would not inside the hive provided it be not so tight, but, being so tight, those on the inside will sweat; that water has got to come out somewhere, and there is the cause of it; put your bees in such a condition that they will not have to cluster tight together and then there will be no such sweating as you speak of.

Mr. Kildow—I believe Mr. Duby has got the wrong idea about sweating; it is the moisture from the breath of the bees; I don't think the bees sweat; it is the natural moisture from the breath of the bees condensing against the cold top.

Pres. Baxter—Every animal that breathes exudes moisture.

Mr. Stone—I do not want to be arbitrary, but I don't believe bees sweat at all. Our President asked: Where does that moisture come from? There is moisture in the air; the rain is in the air; all it takes to condense it is cold and heat coming together; bees make the warmth; the cold is on the outside; that warmth and cold striking together makes moisture. I believe if you would put over your oil cloth, or whatever covering you have, leaves, you would not have any moisture gather on the oil cloth.

Mr. H. C. Dadant—Why is it we have moisture above the cluster of bees and not up at the capping?

Mr. Stone—Hot air goes up.

Mr. H. C. Dadant—You said it was moisture in the air, but it is not, it is from the breath of the bees or it would not be everywhere the cluster is.

Mr. Stone—The breath of the bees coming in contact with moisture—

Pres. Baxter—I said, sweat of the bees; I don't mean in that sense of

the word, perspiration; the moisture that comes out of their breath, just like it comes from a human being or any other animal.

Mr. Duby—I thought the question was understood.

Mr. Stone—That moisture accumulates where heat and cold come in contact.

Question: Is it necessary to pack the sides of the hive for winter?

Pres. Baxter—What is meant by side—inside or outside of the hive?

Mr. Kildow—I suppose it means the outside; that is what I would take it to mean.

Mr. Pyles—I wrote this question; that was the object. This other question has all been upon wrapping the hive and has not brought out that part of the question. Mr. Duby said he uses tar paper all over and around his hives, and we have been talking about condensation, and condensation always takes place at the coldest point, and, if the hive was packed sufficiently on top, the condensation would take place on the cold walls on the outside, and, whenever the sun would shine upon that, moisture would run out. I don't believe with anybody's hive if packed with sufficient packing on top but what condensation will take place on the coldest side of the hive. I believe if you have a reasonable amount of ventilation in the form of a thickness or two of old carpet or burlap is sufficient, and I am not condemning the other. I think I have gotten as good results with three or four thicknesses of burlap on the hive as when I had two inches or three inches or four inches of packing; I cannot see any difference in the result; that is the way it has been with me.

It is plain to me that condensation does take place—and when you talk about condensation not taking place in a single walled hive but in a double walled hive—I don't believe bees crowd together to cause sweating at any time. I read an account of some man's experimenting along this line; he put a thermometer in the center of the cluster, and found the temperature very little different in the winter time than in the summer. They keep down heat in the summer time and by their motions keep heat up in the winter time; the outside cluster were suffering with the cold and those on the inside were the temperature of what the bee's body would be.

Question: What size section is best to use to secure one pound? Is that section plain or scalloped (that is plain or bee way)?

Mr. Moore—It is pretty hard to get any section that will run uniform.

Mr. Coppin—The section I use is 4¼x5x1¼ and it will weigh just one pound.

Pres. Baxter—Never more nor less?

Mr. Coppin—No more nor no less.

Mr. Kildow—I want to say a word or two: I think this question will not do us a great deal of good because there are so many different sections on the market; you can get a pound out of all of them, and I don't think this question is practical; you can take any section on the market and you can pick out some that will weigh a pound.

Mr. Moore—There is no uniformity about it at all.

Mr. Pyles—Along that line there is another thought—each one likes his special section—this special size is the one that Mr. Coppin likes best. We can get just as much money for a 22 pound section case that weighs 22 pounds as one that weighs 26, and just as much for one that weighs 24, and what is the difference so long as the man who is buying it is willing to pay the price; commission men say that; they don't want the heavy weight.

Mr. Moore—They want a section that will run about 21 or 22 pounds in 24 section cases; I use the 4x5 and had some that would run a pound and two ounces this season, and lots of them that weighed a pound, and a whole lot more that weighed a little less than a pound.

Mr. Stone—I don't think bee-keepers ought to give any heed to the requirements of the grocers; they want the section as light as they can get it, and that is not honest; they buy sections by the pound and sell them out by the section; that is one of the causes of complaint in the high price of living; it goes to the middlemen; they buy your honey and pay you only 15 cents a pound for it, and weigh it, and then they don't want to sell it out for 20 cents, they want the section to be as light as possible, that they may sell it for 25 cents; they want the section to be light so as to make a profit in both cases, and honey is not a perishable article. They ought to be satisfied

with a small margin, and I believe it is wise for bee-keepers to disregard what the grocers want, and if they will produce a full pound of honey in a section they will sell more honey and the people will not enter the complaints they do. People have a just cause for complaint of the high price of living, and it is the middleman that causes the trouble; too many of them want to make a living without work. If some of them would go to producing honey, or apples, or some farm product, things would be more equalized.

Mr Coppin—The grocer man does not buy honey by the pound section and I don't think he has a right to sell it for a pound. I am a comb honey producer and I never think of selling it by the pound although those sections hold a pound; I have not sold honey by the pound for the last fifteen years; it is by the case I sell it; and I expect the grocer sells it the same way.

Mr. Stone—You won't deny they prefer to buy it by the pound?

Mr. Coppin—They never ask me to sell it by the pound. If they buy it by the carload, they buy it by the case and not by the pound.

Question: Does honey lose flavor in heating?

Mr. Kildow—That is an important quection.

Mr. H. C. Dadant—I never noticed honey to lose flavor, but honey can easily be injured by a little too much heating; and then of course it will lose flavor and have a slightly burned taste; I know instances where candied honey has been shipped out and when the parties receive it, liquefied it, and said the honey did not come up to the sample. Of course mistakes can occur at both ends; honey is injured by over-heating very easily; the vessel you place your candied honey in, the water must not boil; it is a slow, tedious job unless you are fixed for it, and you are apt to hurry the matter along and the honey will taste burned. It has been noticed a great many times that nice white honey will be a shade darker after being heated even though it is heated properly.

Mr. Duby—I found out honey will lose its flavor if you put it in a damp place. I sold honey to a grocerman and the first thing he did was to put in it a cooler where they had ice. I shipped honey to Chicago and they dumped it in their basement where it was damp.

Pres. Baxter—This question is—Will honey lose its flavor by being heated.

Question—What is the proper temperature for heating honey? And what time is required to best heat it properly?

Pres. Baxter—That is for liquefying granulated honey, I suppose? Mr. Dadant, I guess you have had lots of experience in that line.

Mr. Dadant—It will take close to eight hours to liquefy a 60 lb. can; it depends upon the bulk of the honey of course as to how fast it will go; if you place an ordinary 60 lb. can in hot water and keep the water below the boiling point—a little steam raising off from the water is all right—keeping the temperature from 160 to 180 degrees—it should not go over 80—200 is a little too close to the boiling point—it will take almost a day, unless you are right there with it all the time, you can liquefy two cans; say two different batches of honey during the day; it will take 5 hours for liquefying each can.

Pres. Baxter—That coincides with my experience; I prefer to take it out of the 60 lb. can and put it in a large vessel where I can stir it; it will hasten the liquefying of the honey; it should never get over 180 degrees or you are likely to spoil the flavor.

Mr. Coppin—Honey is usually in 60 lb. cans and you have got to liquefy it before you can take it out. My experience is that it takes about a day to liquefy a 60 lb. can of honey. It takes the greater part of a day.

Pres. Baxter—I will say that I keep all of my honey in barrels and whenever I have a customer who wants liquefied honey, after it has granulated, I take it out of my barrel and then put it in a 60 lb. can; I never put it in a 60 lb. can in the first place unless I am going to ship it right away. It keeps better in barrels than in cans; sometimes I have kept my honey in barrels more than 24 months and it was just as fine as when I put it in. Owing to the poor quality of tins they put in the cans it is likely to spoil if it lays in there more than 12 months, and in the barrels I can keep it in as long as 24 months and have it perfectly pure.

Mr. Cesting—I was working for a bee man twenty-five years ago and he had a can of honey that he opened up that his father left him and this honey had

been sealed up in that can for forty years, and I tasted some of that honey and I could not see that it tasted any different.

Pres. Baxter—Don't you know the secret of that? Forty years ago they used to have tin—they don't have tin now. Tin won't hurt honey but it is the lack of tin that will hurt it; they don't make tin now.

Mr. Moore—What is your idea in regard to galvanized iron tanks for holding extracted honey?

Pres. Baxter—Has any one had any experience in using galvanized iron for holding extracted honey?

Mr. Dadant (H. C.)—I have had honey in galvanized tanks not longer than a month or six weeks.

Mr. Moore—They use them through the west—in California.

Mr. H. C. Dadant—I don't know how long the honey stands in them; we have not kept it in longer than six weeks. We allow the honey in this instance to stand in an open large tank to evaporate.

Mr. Stone—I have had honey stand in small quantities for three months in my de-capping can of galvanized iron and also in my extractor that was of galvanized iron; I noticed no coloring except at the faucet, it turned a little black where it touched the iron, but I never saw any trouble come from the use of it. But I prefer to clean up after every job of extracting.

Pres. Baxter—I would not have any galvanized tanks if I could get tin; my extractor must be of tin; if I get any de-capping cans I must get tin if I have to pay the price for it; for a short while—that is different, but to leave the honey in season after season, especially liquid honey, you will see a big difference in it.

A member—I have been using galvanized cans this season, a 60 gallon tank for filling glasses and small vessels, and I don't see anything wrong with it so far, except as Mr. Stone says, when you commence filling these vessels, sometimes a drop from the faucet will make it dark, but that is the fault of the faucet; it is a cast iron faucet; it is an Enterprise faucet, the best I have ever had.

Pres. Baxter—If you have only used it this year, that makes a difference; it is the honey remaining in the tank and left a while that makes the difference.

Mr. Stone—It will teach you to be tidy and do things up in time.

Mr. Moore—That is what I was afraid of—where honey was left in, that it would eat the galvanizing off and would tend to make something that might be slightly poisonous and not be very healthful, and would probably injure the quality of the honey; it probably would not do this for months, using a new can, but to leave it in for any length of time I should be afraid it would do some hurt; the galvanizing is made of zinc.

Question—Are gentle bees as good honey gatherers as cross bees:

Mr. Moore—Sometimes they are and sometimes they are not. I had, five years ago, the best colony of bees in my yard; made 250 pounds of honey that season with the ugliest bees I ever had any experience with; they didn't swarm, and worked, and I had 250 pounds of honey that season. This season, some of my best colonies, that produced the most honey, were gentle and quiet and easy to handle. You will find in either strain of bees some colonies that are good workers and some that are poor. The thing to do, in breeding, is to work for gentleness and working qualities combined.

Mr. Stone— My best honey gatherers were the best I ever had—some I got from Mr. Dadant last spring; they were the best honey producers I had; they never seemed to notice me when I went around the hives.

Mr. Moore—Smoke would not subdue these ugly colonies and it was hard work to work with them; I had bunches of them follow me up to the house.

Mr. Pyles—Mr. President, I wish to state that I never yet found a colony of bees that I could not handle. I have been where they took me clean across the yard to show me some hive that there was something the matter with, and I knew what was the matter, and they are not very hard to handle when you know how. I don't think there is any difference in the honey flow—between cross or gentle bees; crossness has nothing whatever to do with honey gathering unless there would be so many of them coming around after some fellow and there would not be any bees left to gather honey—I wonder if that is not the case sometimes with the cross bees that don't gather much honey; in some colonies I think the queen is to blame.

You must have a great quantity of bees of the proper age to gather proper honey at any time, and give me that condition and plenty of nectar coming in, and I will get a good crop of honey regardless of color or disposition of bees.

Pres. Baxter—In regard to cross bees, I will say that, without regard to race, my experience has been that a cross colony was always a good honey gatherer; a cross colony is always stronger; they are very prolific in bees; they are good foragers, and there is always honey there, but my experience is that I can't put up with their stings for the sake of the honey when I can get as good results from gentle bees from proper breeding.

Mr. Duby—A bee man should not be afraid of bees. I have never seen the colony of bees I could not manage. I have had to give them up for the moment, but I have gone back to them prepared and managed them. If you had two colonies of bees—one of which you say is gentle, and one, cross—I would take the cross one every time for gathering honey.

In the poultry line, I am afraid our poultry breeders are forgetting the laying hens—and the same thing with hens exists with the bee-breeder—we are forgetting working quality of bees. We want honey; I can work a cross colony of bees any time—stings are nothing; a bee man ought to be stung once in a while or he is not a bee man; honey and stings go well together; I say give me a cross colony of bees and I defy any bees that I ever have seen that I cannot conquer.

We don't want to fool with bees; if you can't control them one way, try another—take smoke.

Mr. Cesting—My experience has always been—the croser the bees the better honey gatherers.

Mr. Coppin—We pay a high price, to get the best bees we can get, and at the same time here you are upholding cross bees. For my part, if I have a colony of bees, and I can hardly get anywhere near the hive but that they will get up and get after me—I take the queen out and kill her and give the bees a queen from some other hive that will raise a gentle race of bees.

Mr. Pyles has said that he never saw bees that he could not handle. I don't know whether he knows cross ones from tame ones, but I do. I handle the cross ones, too, but I kill the queen if they are too cross, and get gentle ones in place of.

A member—Is it profitable to handle cross bees? We had Cyprians a good many years ago and they were cross, but I don't find it profitable to handle cross bees when I have to spend twice as much time with a cross colony as with gentle bees.

Color is nothing with me. I want something that will produce results. My experience has been that the leather colored Italian has chiefly proven the most profitable bee I could get. When you have a great many colonies—mark your colonies and breed from them; breed from the best colonies; that is the only way to get good results, and, if you have to buy from the outside, buy from some one you know who has had results. Color is nothing.

Mr. Pyles—I think that is the way I would like to express myself about the matter—color is not anything. I can handle the cross bees, and I know when they are cross, too, but I don't think it is profitable; I am like the President and Mr. Coppin—whenever I find a colony of bees that will persist in coming out—I don't have them very long. I may keep them until I can raise a queen, but I usually get rid of them; besides, your neighbors should be taken into consideration.

Convention adjourned for recess, ten minutes.

Meeting called to order by the President.

Question—In getting queens from the same parties every year would any trouble come from inbreeding?

Mr. Duby—I don't know about this but I would rather infuse new blood anyway; that is the only way to increase the value of stock—get better stock—an infusion of new blood.

Mr. Stone—Did you ever sell any queens, Mr. Duby?

Mr. Duby—Yes.

Mr. Stone—Would you recommend a man to buy queens of you who had bought them before? Of course you don't know how your queens are bred.

Mr. Duby—No.

Mr. Stone—Would it not be better to get queens of you whom I know than of some one else whom I do not?

Mr. Duby—Yes, it seems so, but we cannot control the breeding of queens.

Pres. Baxter—What do you think

about it, Mr. Dadant? You handle a great many queens from different places?

Mr. H. C. Dadant—There can't be any trouble about inbreeding; but I would suggest that a person get queens from different breeders. I would not get queens from every breeder who advertises. It is a good plan to get queens from two or three of the best known breeders, and stay with those, or, if you are satisfied with one breeder, get queens from him right along; he is all the time selecting, and he should be; and if you have faith in his ability to do so you will get his best queens all the time.

Inbreeding—there are articles on that subject in several of the Bee Journals not far back. The perfected queen —The queen when she hatches is not a full sister to the drone for the reason that the drone egg is an unfertilized egg; for that reason a queen and drone hatching from the same hive are practically no blood relation—there is practically no inbreeding.

Mr. Stone—They would be related on one side.

Mr. Duby—I believe there would be a relation on both sides, Mr. Chairman.

Pres. Baxter—One at a time, please.

Mr. Stone—Could not be related on one side; the mother would be the mother to the drone and to the worker but not necessarily the sire.

H. C. Dadant—The drone is no sire at all; no sire at any time.

Mr. Stone—But he is the son of the queen, and she is the mother of the worker.

H. C. Dadant—Yes, but the egg is fertilized by fertilization from another drone so that makes the blood of another drone entirely different.

Mr. Stone—It would be pretty hard to mix them.

Mr. H. C. Dadant—I would like a word from the President on that.

Pres. Baxter—My idea is this:

That there is no danger of inbreeding if you keep getting your queens all the time from the same breeder; I have done this for years and when I find a strain of bees I like I stay by them and as much as possible I raise my own by selection, and I am not at all afraid of inbreeding in bees. I think it hardly possible, and even if it were I think some of our best strains of domestic animals have been produced that way; I am not afraid of it at all.

Mr. Duby—We will take colony No. 1—they want to supersede; when they want to supersede there are drones and of course they will go to work and raise a queen out of the same egg as the worker bees and she merges and goes out and lays—what is to hinder her from mating with one of the drones from that hive? She is a sister of that bee.

Pres. Baxter—I will say there is not one chance in a thousand that she will.

H. S. Dadant—If she does, she is not a full brother, for the reason that the drone is the unfertilized egg while the worker or queen is a fertilizer; a little inbreeding is not detrimental, but to carry it on to any great extent would be.

Mr. Duby—I don't care if the drone egg is fertilized or not; they are all from the same queen and it naturally appeals to me they will be brothers and sisters.

Mr. Pyles—In the establishment of what became of the Jewish race of people—if we will take up the history of them that we find in the Bible as being authentic—Abraham is the father of the Jews and married his half sister, and his son Isaac married his first cousin, and his son Jacob married his first cousin.

They were closely related all the way down. They were frobidden to marry with other nations; they started from one father; they had been inbreeding for the last three or four thousand years —and every Jew is a money-maker, is he not?

Mr. Duby—They are still Jews.

Mr. Pyles—They are Jews; you don't expect to make mosquitoes when you breed bees. Every strain of trotting horses is closely related. If you will pick out trotting horses that have made phenomenal speed records, you will find them closely related.

Characteristics are established by a line of breeding, and, as for me, I would rather undertake to establish a strain of bees of my own; I don't care whether you name them after me or not, but I want them to be honey-gatherers.

I know a man in our community, living close to me; he doesn't make any effort to secure any one strain of bees; he buys wherever he wishes to; he wanted me to take care of his bees

this year, on shares. I handled them on the same plan that I did my own and gave them the same amount of care; twelve colonies produced nineteen cases of honey.

A year ago this fall I bought eight colonies of bees from a man to whom I had sold queens.

I am not advertising queens because I have not the time to raise them.

I sold this man his queen, one that I raised myself, and from these eight colonies he got 8 cases of honey.

From seven spring colonies I got thirty cases of comb honey, and they are inbred and preetly closely, too.

Question—Has anyone tried shipping extracted honey or comb honey by mail and with what success? How is it packed?

Mr. Dadant—I asked that question; I had a little experience and wondered if any one else had. We received two 5 lb. cans, friction top, alfalfa honey from Colorado; there was no wrapping around the cans; there was a tag on the handle. They got banged up pretty well; it was almost a round can when received. Very little honey leaked out, but enough to make the mail sticky; the cans were almost burst in their joints.

I believe mailing honey (especially if it is candied, as I think it always should be) is going to be a success, and there is going to be a good demand for extracted honey by mail. With comb honey, it is a very difficult matter, although it could be shipped by placing the comb honey in baskets, like you see baskets of grapes and peaches shipped; you can send a basket of peaches by mail; put a tag on it, and it is kept outside the sack, carried by the handle and delivered, and comb honey should go the same way. I believe there is a good trade in sending honey by mail if a person will work up that kind of trade.

Pres. Baxter—I believe it is coming.

Mr. Stone—The handle is a very needed article.

Question—Is the National Bee-Keepers' Association as at present organized a success?

Mr. Duby—Mr. President, as it is now run I think it is.

Mr. Stone (Secretary)—This year I received a notice from one of our bee-keepers—he lives at Dakota, Illinois, telling me how many cans of honey he had—60 lb. cans; he said—"It is white clover honey", and he gave me his price, and I went to the telephone and telephoned to Mr. Becker; he is usually buying honey for the fair and I didn't know but that he wanted some for that; and I sent the letter that I received to the National, and wrote to this bee-keeper that I had forwarded his letter to the National, and I told him I had telephoned to Mr. Becker and he asked him to send to him a sample the same as he had sent to me, and state the prices, so that he would have them as coming direct. It was not two weeks before he had sold half of his honey, and since then he has sold the balance of what he had. That man got his honey sold before it had time to come out in this Review because I saw his name was not among those who had honey to sell.

In this Review is a list of all the Bee-keepers that belong to the Association, no matter where they are located in the United States, who have any honey to sell or who wish to buy honey; this is put in there, and it does not cost us anything but our $1.50 fee (membership); a man told me here today that he would give $1.50 for that book just for the value he receives from it.

I paid heed to an ad they put in here (the Review) for tin cans, and I sent for 100-5 lb. cans, and they were much better than what I had ever gotten from the American Canning Company, Chicago. This can was one ounce heavier without a cover on it. I set my can on the scale at 5 or 10, and then put honey in it until it goes up, and I had to set this can over another notch farther than I had to for the other. This weighed one ounce more than the other.

Then I sent for 50-10 lb. cans; I did not send both orders at one and the same time; they filled one order from Detroit and the other from a suburb of Chicago where the cans are made—Maywood, Illinois; it is in Cook County—and those cans were ideal; they were as good cans as I ever saw, and I got them cheaper than I could get them anywhere else, and the freight was not any more than it would have been if I had sent to other places.

And I want to say we can't do without that paper very well; that is not saying anything against Gleanings or the American Bee Journal; I take them

all; and I don't want to do without any of them.

Pres. Baxter—Your argument is that it is a success for the benefit the members derive—

Mr. Stone—I believe it is to our interest to make it a success.

Pres. Baxter—Are there any other answers to the question?

Mr. Pyles—I wrote this question. I remember two years ago—that is the last time until this time that I attended a State Convention—this matter was up and they decided to join in a body and advised the members to get in for the $1.00 rate before the first of January—after the first of January the dues would be $1.50.

I stated here in this hall that day I didn't care if the dues were $5.00 if I got $5.00 worth of benefit—and the matter at that time went over a year. At the end of a year there had not been anything done; we got in for $1.00 that year; last year the dues were $1.50.

This same matter was thrashed over in Chicago last year and it was decided then to stay with the National and give them another year to see whether they were going to do anything.

Is the average bee-keper benefited by the National?

What will a 60 lb. can cost of the National Bee-keepers' Association?

Mr. Stone—I never bought any.

Mr. Pyles—Can they be bought for more or less from the American Canning Company of Chicago? If they cannot be bought for less of the National, there is no great benefit received by the bee-keeper. Thirty cents a can is what the National Bee-keepers' Association is charging.

Mr. Stone—I got the cans I bought for less money—the 5 and 10 lb. cans.

Mr. Pyles—There is added freight besides having it come from Chicago; you pay a higher freight rate. We are not getting anything in that respect. There must be some other reason for saying it is a howling success.

I would like to have it pointed out to me if we are receiving benefit through the National under the present system of management.

Last year we sent a delegate from the Chicago Northwestern Convention; we sent a man that was hollering worse than I was; the National put him in to office, and now he is making a howling success of it. I can't see where very many people have received very much benefit from it yet.

We are getting the Review, and I think it is not a fractional part of the success it was when Mr. Hutchinson was editor of it. I would rather pay a dollar for it when he was living and edited it than twenty-five cents for it today.

Pres. Baxter—This question ought to be taken up as a special question by the Association, and decide whether we want to remain affiliated with the Society. I think we ought to decide ourselves whether we want to remain affiliated with the National; it ought to be made a special question.

Mr. Moore—Under the Constitution of the National and State Association, the State is affiliated with the National. When a man joins the State Association he becomes a member of the National without any extra expense; membership in the State Association is $1.00; that is established by our Constitution and By-Laws; when you join the National and pay $1.50 you are paying $1.00 for subscription for the Review, getting membership in the two Associations for $.50.

We are not paying anything for membership in the National—not one cent.

If there is any one who thinks he is getting any benefit by having membership in the National—all he has got to do is to drop the payment of the $.50 and pay $1.00 for membership in the State Association, same as it has always been.

We are an affiliated Association, but don't get a subscription to the Review unless we pay the $1.50.

Mr. Stone—It would be very much better for all these men who are paying their $1.50—and every one has paid that here except one gentleman who put his boy in for $1.00 and they do not want two Reviews in the family. Why not save this $.50 and put $1.00 in the State Treasury if you think I get anything for my talk? It will help our fund more, but if you give $.50 more you get the Review for $.50; the Postoffice won't allow them to make a present of the Review; they have to pay $1.00 for the Review to get membership in the National Association, but as far as our being interested we will talk for the $1.00 and not the $1.50—but I want to pay my $1.50 and get

the Review—every man to his own choice.

Pres. Baxter—Is there any other business before the meeting this afternoon? Possibly we had better stop with the questions. Is there any unfinished business that should be taken up this afternoon.

Mr. Stone—No, there is nothing but the questions.

Mr. Pyles—I am not satisfied to drop this matter now, and some will probably want to discuss this question tomorrow, as a question relating entirely to the Association.

Pres. Baxter—We will have no matter before the Association this afternoon. Why not take the matter up right now, if it is the wish of the Association to decide what they want to do? It is the wish of the Association, a motion to that effect will be in order—to decide whether they want to take it up or not.

Mr. Moore—I do not see why there is any necessity of taking this matter up; this is a matter for each one individually to decide. When a member joins the State Association he becomes automatically a member of the National; he does not have to take the Review.

Pres. Baxter—Do we wish to remain affiliated?

Mr. Moore—I would not for one moment think of drawing out from the National; they are working along a line where I think they will benefit us, and the only way that they can benefit us is for us all to stay together and help run the business in such a way that we will ultimately get benefit from it.

Mr. Stone—How will we be benefited if the Review is not kept up?

Mr. Moore—That is a matter for each one individually to decide.

Pres. Baxter—That is the position I take; you and I are not the whole Association. I would like to know the pleasure of the whole Association. For my part I want to remain affiliated, and I want the State Association to remain affiliated.

Mr. Duby—I never heard of a single party who wanted to withdraw. I think last year it was unanimously adopted that we should become a part of that Association.

In this Journal (present published Review) there is an article that is worth to any bee man one dollar.

I used to read this Journal and pay $1.00 for it and I would give $1.00 for membership in the Association—pay $2.50 all told—and now I pay $1.50.

Pres. Baxter—That question is not up for discussion now. The thing for the Convention to decide is what they want to do. The Society of last year was not the Society of this year. You cannot have one year hold for all time; every meeting has to decide that for themselves. If the majority of the members today do not want to be affiliated, they are not compelled to. If any one wants the Association to withdraw—let them make that motion—make a motion to that effect, and see what response we can get; if the motion is not carried, we remain affiliated.

Mr. Duby—I don't believe that you would find one here who would make a motion to withdraw.

Mr. Pyles—It seems to me I have got a wrong idea of the question—but the question, as it appealed to me, was an honest discussion as to whether we were getting any benefit—not the advisability of the State withdrawing or not withdrawing from being affiliated with the National; that is not the question as I wrote it.

Pres. Baxter—There is nothing of the kind before the house now; it will have to be a motion to withdraw our affiliation before the question can be discussed.

Mr. Pyles—I thought your own ruling was that the action of last year was not binding this year—

Pres. Baxter—My ruling is that a motion made last year by the Illinois State Bee-Keepers' Association to remain affiliated with the National does not bind us to stay in this year. We remain in unless a motion is made to withdraw and is carried; we remain in until such a motion is made.

Mr. Stone—I will make a motion that we stay affiliated. I wil make a statement: Suppose a motion is made to withdraw and the majority vote to withdraw; that don't hold good individually; I can do as I please. Every man who joined here this year has paid his $1.50 to be a member of both Associations and get the Review, and we don't have to every one of us join; they will take whatever comes.

Pres. Baxter—But the State Society would not be affiliated any longer if a motion was made and carried to withdraw. As long as no motion is made to

withdraw our affiliation from the Society and carried by a majority vote, we remain affiliated; and the question cannot be discussed unless such a motion is made and is before the House. This question as to benefits received—that is a different thing; that is the personal opinion of the members present.

Mr. Moore—There is a question as to whether the National is a success as it is at present run.

Mr. Pyles—There is such a question—and one as to whether we withdraw or not; I was called out of order.

Pres. Baxter—I did not intend to call you out of order on the question before the house.

Every one has a right to give their opinion as to whether they are deriving any benefit by affiliation with the National, but it is outside of the question before the house.

Mr. Stone—If we don't say anything about it, we are affiliated. If there is any one present who wants to speak on whether it is a success or not, may we not hear from them?

A member—There was a question before the house as to whether this Association was receiving any benefit under the present management of the National Bee-keepers' Association.

Mr. Stone—I told what benefit it was to me—Mr. Pyles told what benefit it was to him.

Mr. Pyles—Mr. President—The question, as I started to say before, was—have we received any benefit? Mr. France, when he was manager, sent out a slip of paper having on it all the honey there was for sale—and those who wanted to buy. As I have stated—I take the Review as a member of the National Association, but the Review is not what we pay $1.00 for, not by any means, not in my judgment at least.

When the bee-keeping fraternity lost Mr. Hutchinson, they lost something they are not going to be able to replace in a little while and any one else taking up the Review is not going to make it the Review that Mr. Hutchinson made it. So when we pay $.50 for the Review we are not getting as much as when we paid $1.00 for it. I am willing to pay for the Review for what there is in it—if it is made of benefit; that is the way I feel about it; it may not appeal to the rest of you that way. I am not trying to force my views upon you.

Personally, I can say I have not received $.50 benefit from it. Some people may find in most any article that might be published in any one of the bee-keepers' papers full value for the cost of the publication, but I don't do this with the Review. If the State Association continues affiliated with the National another year, I will do so, and see what benefit will have been received by another year.

H. C. Dadant—Perhaps you had better give them a little more time; they have been changing management you know, and I don't think it would be at all feasible to withdraw; I believe in another year you will be better satisfied.

Pres. Baxter—Gentlemen, let me suggest, it is a very difficult matter to manage. I, for one, would not want to remain a member of the National if that organ took up any competition with other Bee Journals—if they took up the subject of bee culture and all that; I don't think it is proper to come out in the field and compete with other publications in anything that is not fully connected with the Association. I know the Review is not as a bee culture paper anything like what it used to be, and it should not be as an official organ. It is devoting itself to the interest of bee-keepers in publishing the honey they have to sell, and giving them items of information, et cetera, without going into the general field of bee culture. I think that is right, as I look at it, and I think they do pretty well aong that line; I think we ought to give them more time to see what they can do. I believe they are following pretty closely in the foot steps of Mr. France, although I think Mr. France ought to have more credit for what has been done; he has done more for the National than any one so far, but we do not know what time will develop.

A member—I can say that the Review has been worth several dollars to me in the last two years in ordering supplies through the Association—several dollars.

Mr. Pyles—That is a statement that I have heard made repeatedly; I will say this, there are a good many people who buy through some different source and are not ready to investigate whether they can get goods cheaper or

better. I do not like to find fault with anybody's system of business. I know there are men in business from whom I could not afford to buy and pay the prices they ask for lots of things. Take it in the matter of shipping cases; you can buy shipping cases for 13½ cents, complete; the National Bee-Keepers' Association are not offering anything better than that and I know it.

Mr. Stone—Did Mr. Pyles see this list here of honey for sale (indicating column in the Review)? If I have honey for sale or if I want to buy honey, that column in that page and the next one is worth $5.00 to me, or, may be, $10.00.

A Member—If you advertise in some paper you have got to pay that much.

Mr. Stone—Yes, you have got to pay more than $1.00. One man has sweet clover honey for sale and there are a dozen that have alfalfa honey, basswood honey, etc. There is not a bee journal that will take your name and advertise that way without charging you more than the price of this Journal; and they will keep that in there until you tell them you have sold your honey and tell them to take it out.

Pres. Baxter—I think we should close this discussion and take up something else.

Mr. Stone—I brought a letter to the Convention, addressed to the National Bee-Keepers' Association, which I would like to read. I brought this letter here that I might get the voice of the Association; I suppose it has been sent out to all the Secretaries; they wish to know how best to conduct things—how often a report should be sent in, et cetera.

Dear Sir—The Bureau of Statistics of the U. S. Department of Agriculture has consented to attempt a honey crop report for the United States. This is a resultant of the petition of the National Bee-Keepers' Association at their last annual meeting in Cincinnati. The Bureau desires suggestions for procedure. Would you kindly answer the folowing questions, making other suggstions which may occur? The sooner this information is in the hands of the writer the greater the progress will be facilitated.

It is proposed to have corresponding reporters throughout the county who shall periodically, or as the Bureau may desire, report on honey crop conditions. The Bureau would ascertain:

1. What kind of reports the bee-keepers most desire?
2. Would you like both the extracted and comb-honey crop estimated?
3. At what date should this estimate be made?
4. Would you like honey crop prospects to be taken previous to the honey flow?
5. When the harvest is made, would you like a report of the crop of a town, county or state?

I make the following suggestions::

Signed.....

P. O.....

Very truly yours,

(Signed) BURTON N. GATES,

President.

Pres. Baxter—There is something before us for your earnest consideration. I think if the bee-keepers of the United States had reports, like the grain growers have and the Board of Trade men, on the conditions in the spring and the conditions existing as the season advances, the prospects and final results, we would have something to base our prices on. We would know better what honey is going to be worth. We would not be making low prices when we should receive high prices, or we would not ask high prices if the market did not warrant it.

Mr. Stone—It would be well, Mr. President, to take this up now, and get answers to the questions: "What kind of reports the bee-keepers most desire?"

Pres. Baxter—I suggest we have reports the same as the grain men have; they know what the prospects are at the beginning of the season, with monthly and periodical developments—are kept advised as to the conditions as the season develops. They make final estimates and final reports as to what the actual crop is as the season progresses. What are the views of the members of this Association on the subject?

Mr. Stone—What kind of reports do the bee-keepers most desire?

Pres. Baxter—Whether we want a series of reports from the beginning of the season, with prospects down to final results.

H. C. Dadant—I understand this letter has been circulated among all

the Secretaries of the different State organizations, and perhaps minor organizations. Mr. L. C. Dadant, Secretary of the Chicago-Northwestern, received one a few days ago; and it might be a good plan to consider this very carefully. We ought to ask, I believe, for a report from at least each State, and the Bureau can condense this and group the information, and can give us reports from different states like they do for the grain reports. I don't believe it would do to have a general report; we ought to have reports from different sections of the country turned in.

Mr. Stone—This shows, Mr. President, what they are trying to do in the National for us.

Mr. Duby—There would be considerable trouble if you get to the bottom of it; first, to make the report, they have to get the report themselves.

Pres. Baxter—Mr. Duby, the Department of Agriculture at Washington would undertake this; they obtain the crop reports all over the United States and might as well put in the honey report with the other.

Mr. Duby—Could we get a good, true, correct report? Would they be in a position to find out correct reports? Could we get a report that we would find reliable?

Pres. Baxter—Just as much so as on the grain reports.

Mr. Duby—You are mistaken there, my friend; the reports on grain are made from the elevator; in this instance, no one would make a report unless from individuals. Lots of bee-keepers do not want to make reports of how much honey they have got and how much they get for it.

H. C. Dadant—We have a grain report already; I have seen it in the papers and the grain is not in the elevators; we can get this information the same way, from the bee-keepers.

Mr. Pyles—It appeals to me that any report that is gotten about the condition of the honey crop will have to be gotten in same way the grain report is. The prospects of those things have to be taken into consideration, and in our township there is some man making out a report as to the condition of the crop as he sees it; they are experienced men and do not take anything for granted. They see what per cent of standing corn there is in this field and that, and about what the condition is as to growth, moisture—what the prospect appears to be; and they make these reports every two or three weeks, and this report—these reports—go in to the Government and the Government bases their calculations on that information.

Any report we give must be sent in in the same way and will be just as authentic as to the condition the grain is before harvested.

Pres. Baxter—I will say, I know these crop reports can be made correct. I have been connected with the Illinois State Crop Reporting Bureau since 1887 in our county. Every time a request comes in for a report, we go out and examine the condition of things. I know that my co-workers in the county are constantly keeping their eyes on the prospects and on the development of the crops, so as to report on the number of animals that are going to be marketed—or are being fattened—the condition of health, and all those things; they are constantly watching out for this—and it is the same throughout all the counties of the state. I believe Mr. Stone is one of these Reporters, in his county. I know we are sending in very careful, accurate reports from different locations, and when this is extended all over the country, we can't help but get something pretty nearly accurate.

I think we want to pay close heed to this communication and get the honey reports sent in to the Government.

Mr. Moore—It states in this letter—"It is proposed to have corresponding reporters throughout the country who shall periodically, or as the Bureau may desire, report on honey crop conditions."

Mr. Stone—I expect Mr. Baxter will get it in his county—in connection with the State Crop Reporting Bureau.

Mr. Moore—The information might be obtained through the National and State Associations; they could appoint a practical bee man for this work—some one who is familiar with honey and honey crop prospects.

Mr. Pyles—That is the only way it can be done, and it must be done by practical bee men. While Mr. Baxter may be able to tell what the condition is in his county and other men may be able to tell what it is in their county—there are few crop reporters who know anything about the honey

condition; they are not practical bee-keepers.

Pres. Baxter—I beg to differ from you; in my reports I do not have to give reports on fruit alone; my business is fruit growing and honey production; I give reports on everything; I don't take my own judgment for it; I ask a thousand questions of the people, and then sift the matter down and send in my report. Any man making these reports, with any common sense, can go out in the country and get reports on anything he wants to if he will tackle the right man.

Mr. Stone—Don't you believe this is along that line and that these questions will be answered like they are regarding other things, grain, oats, wheat, rye, barley—the same will apply to honey?

Pres. Baxter—The regular reporters will go out and find the accurate conditions as they exist in their localities, and report on it like on anything else. All we have to do is to tell them what we want—what kind of a report we want, and they will do the rest.

Mr. Pyles—I believe I will have to differ from you in your views. To start with: In our community we have two men, besides myself, who are trying to make a living in the bee-keeping business, and I know that two of those men will not tell their neighbors what the conditions are or the amount of honey they produce. These crop reporters do not always keep these things to themselves; they can't keep these matters to themselves oftentimes. If your neighbor finds that you are making a lot of money off your bees, he may begin to holler about your bees getting on his premises, if he sees that you are prosperous, and then your trouble begins; sometimes the other other fellow feels antagonistic, if you are prosperous, or will get after you if you have your bees too near the road, or for some reason along that line.

These reports will have to be gotten by the bee people interested in the bee business themselves. I know a reporter that can go into a field and tell you nearly what the crop will be of corn without husking an ear of corn, but he would not be able to find out any information from the bee-keepers.

One of the bee-keepers in our community is keeping bees successfully, off from somebody else's farm—if they found he was making a thousand dollars from his honey, they would raise the rent so high that he couldn't stand for it and could not keep bees.

Mr. Coppin—At that rate it seems to me we could not rely on bee-keepers for an accurate report, if they would not tell the truth. If the bee-keepers themselves would not tell the truth, we would have to have some one from the outside, who is disinterested, to make an estimate.

Mr. Pyles—I did not insinuate these men would not tell the truth, but they would practically not give you the information if you asked them. I would feel that the correct information could be obtained through such men as Mr. Kildow or Mr. Ellison, two men on either side of me; but Mr. Winthrop, our grain reporter, would not be able to find out from either of these men.

Mr. Duby—Even if we should not get accurate reports, it would certainly be a help and would not hurt anything, and it would give the people the impression that we are trying to do something.

I certainly would be in favor of having a report of some kind; the report could be sent in to Washington all right, but I agree with some who have spoken here, that we can't always get a report from the bee-keepers. Bee-keepers are nice people—they are a nice class of people. I know some fishermen who tell stories—but, when you come to bee men, they come with a great big, long yarn, according to their fancy, and when you come to get to the bottom of it, that is another thing; any kind of a report I believe to be better than none at all.

Pres. Baxter—I would suggest to the Association that this matter be settled in this way—that we try to get a report and leave it to our coming Executive Committee to formulate what kind of report we should have. If that meets with your approval, a motion to that effect will be in order.

Mr. Pyles—I move that this matter be referred to the coming Executive Committe with power to act.

St. Stone—Supposing the officers of the Executive Committee were not elected until the very last minute—ought this not to be done right away?

The above motion was seconded and carried.

Pres. Baxter—What is your further

pleasure? Do you want to hold an evening session?

Mr. Moore—Were there any papers gotten up to compete for prizes?

Pres. Baxter—Does any one know of any? We might take this matter up now—there seems to be no papers prepared; I think it is a good thing to get these short articles, and it may give us a great deal of material for our report. Had we better continue to offer prices for short articles, with this provision, that the writer is not obliged to be here in person to read his essay? I would like to hear from the Convention—a motion would probably be in order that we may get the sense of the meeting.

A member—I think the writer should be here himself.

Mr. Pyles—My idea about making a program is this: I think the committee should look over a list of the people who are able to write, and then give them live topics to write upon and such as pass the Executive Committee's approval, let them pay their way here, their carfare or whatever remuneration they may decide to give. The getting up of a prize paper, such as you speak of, does not require any practical experience—it is just the best paper; that might be in a literal sense or anything else. A few years ago we had a girl read a selection from Maeterlinck—and the people lost their head over the very beautiful language that was expressed in the writing. I think the Committee should select the people to do this writing; let these articles be submitted to the Executive Committee and let them pass upon those that are fit to come before the Convention—and have something read that will be both practical and instructive.

Mr. Stone—This thing of getting the Executive Committee together is no easy matter; we thought to get them together at the Fair, to decide about the badges; and but two were there, and we chose the badge. If left with the Executive Committee, that means the Secretary has to do it, and he does not know all the good writers.

Mr. Duby—Mr. Chairman, I really don't know that we could adopt a better plan than we adopted last year; let whoever wants to write an article; I understood, last year, it was only for the young folks—but I think it would be a good idea to let whoever wants to write an article or a composition or a piece, on bees—whoever feels qualified to write such an article. Because we failed this year is no reason to argue that we will not be successful next. I think next year my brother will be in a position to come, and very likely others. Big things move slowly—and this is practically a big thing for a boy 12 or 14 or 16 years of age to come two or three hundred miles to read a paper before an audience that is supposed to be big men; I don't think this idea ought to be discouraged; let us adopt practically the same plan for next year as we did for this.

Pres. Baxter—You understand, this was simply to encourage the young people to do something along this line—it was not to instruct bee-keepers; it was to encourage the young to write something practical about bees. The Association was to pass upon its practicability or its worth—the amount to be received as a prize was very small. The premiums and the funds are donated to us by the State for the purpose of encouraging and fostering bee-keeping, and I thought there was nothing like encouraging the young people. Of course if you want some old experienced bee-keepers to give you a long paper on some subject—on some topic—that is a different thing; I never saw much sense in it, to tell you the truth.

I like these informal meetings—answering questions—better than any paper I ever listened to.

The object of these written articles was simply to encourage the young—and the amount offered is very small; it must pertain to bee-keeping and have some value; it must not be a flowery speech or essay; it has got to treat of some knowledge of bee-keeping.

Mr. Pyles—I observe the notice that the Secretary sent out said there was no restriction on these essays; if a restriction was placed on these articles—that they must be on practical matter; then I am in favor of it, but just an essay, as is understood, does not necessarily have to be on something practical; very often it is written in the finest language, on nothing practical. I am in favor of it if you will have the articles written along practical lines.

Pres. Baxter—Ladies and gentlemen

—we are at sea; we have nothing before the house; a motion to continue this discussion or entertain something else will be in order.

Mr. Pyles—I move this matter be continued, with this one addition, that the articles written shall be along practical lines.

Mr. Coppin—That was the way it was suggested before, is it not?

Mr. Pyles—I notice the Secretary sent out notice stating there was no restriction upon this.

Mr. Duby—The question was understood it was about bees—what will the young people know about things practical?

Mr. Stone—The articles were supposed to be written by bee-keepers or members of their families.

Mr. Moore—The motion was that we offer a premium or a reward of five, four, three and two dollars to the writers of papers to be read at this convention, without any arguments or criticisms on the papers; each to be read by the writers of the papers, and after they are all read, then decide which is first, and so on, by vote of the members; according to the merit of the paper.

This is as the motion read when it was given at the last convention, and carried, with the amendment that the article, or essay be limited to 500 words.

Mr. Pyles—That is the position I took—it does not say it is along practical lines.

Pres. Baxter—Are there any further remarks? A motion is before the house that this be continued, and that it be along practical lines in bee-keeping.

Mr. Stone—I don't believe any one would write a paper to come before a Bee-Keepers' Association and not be along practical lines.

Pres. Baxter—If that is the case you are in favor of this motion, and that is all there is to it.

Mr. Moore—The idea in mind—was to get the younger ones interested; to get the children interested, and, if the children of practical bee-keepers wrote anything, it would undoubtedly be along practical lines. If my children wrote an article, desiring to compete for these prizes, I would revise the article—look over the paper, and show them where they made mistakes; while it would be along practical lines, it might not be of any very great depth, coming from children, but still would be practical.

Mr. Duby—I am in favor of the motion, having the word practical dropped out.

Mr. Moore—While some young person, boy or girl, from 12 to 16 years of age would not be competent and would not have the experience to write a paper that would give us older people any instruction, still they could take some line of work and write their experience.

Supposing I should take my son this year and give him a colony of bees to handle, and he could write his experience—what he actually did with the bees—that would be along lines of practical work among the bees, and it would be an incentive to them to go on and study.

Pres. Baxter—The object is to draw them out and see what they know and encourage them to go on further.

Pres. Baxter—The motion is that we continue giving prizes for these articles, the same as last year, the papers to be along practical lines—all in favor of the motion signify it by saying, aye.

Motion seconded and carried.

Pres. Baxter—What is your further pleasure? Do you wish to hold a session this evening, or adjourn until tomorrow morning?

Mr. H. C. Dadant—I would favor a session this evening. I believe there are several of us who would like to get away tomorrow afternoon, in the middle of the afternoon, and it might make it impossible for us to get away. I would like to make a motion that we convene at 7:30 this evening.

Mr. Moore—I have been wondering if there is any business ahead of us that we need to have an evening session; can we not get through with our work tomorrow and not hold an evening meeting?

Mr. Pyles—I make a motion that we adjourn until 8:30 tomorrow morning.

Motion seconded and unanimously carried.

THURSDAY MORNING, NOVEMBER 6, 1913.

Meeting called to order by the President, Mr. Baxter, at 9 o'clock.

Mr. Baxter—We will take up the unfinished business of yesterday; are the Auditing Committee ready to report?

A. L. KILDOW,
State Inspector of Apiaries.

Mr. Moore (Chairman, Auditing Committee)—We found everything correct with the exception of one order that Mr. Becker had paid out; he entered it as $15.16 and paid out $15.61, so the balance on hand shows $.45 too much.

Pres. Baxter—You have heard the report of the Auditing Committee. what will you do with the report?

Motion made that report be accepted and placed on file—seconded and carried.

Pres. Baxter—Any further unfinished business?

Mr. Pyles—The reason I did not pay my dues here. I expect to attend the Chicago-Northwestern; I believe it should be kept up; they have a good convention; it will pay anybody within a reasonable distance to go there. By paying my membership fee in Chicago we become members of the Chicago-Northwestern and the National, at the same price. Members may come in a body if they attend the Chicago-Northwestern, and they are entitled to representation in the National Bee-Keepers' Association.

Mr. Duby—Mr. Chairman and friends: You may think I am a crank about our Eastern Illinois Association, but the question was brought up before me this morning which I think ought to be brought before you. As I said yesterday, we have a nice meeting each year over there of importance, and we talk bees from early morning until late at night without going to a picture show. I am afraid we will have a short report here; in fact, too short.

Now the question has been brought before me—Why not have a report taken of the Eastern Illinois Convention, and publish our report with the State Report, which would make it much longer and of much more interest, and at the same time I think it would be an inducement for other parties to join the State Association, in that they will get the report printed. Now we cannot afford to pay a reporter down our way but possibly the State could help us out in this. I think it would be a benefit to the State and to all the members if we could get the report printed.

Mr. Stone—Can you not have your Secretary give us a synopsis of your report?

Mr. Duby—We are all working for the benefit of bee-keepers, and why not put money where it will do the

most good? Now this meeting will not cost us as much as we expected; there is not a cent to be given for any essays; there would be five or six essays and that would mean $15.00 or $20.00. I don't know what a report would cost us down there. I am working, like you, for the benefit of the Association and bee-keepers in general.

Pres. Baxter—We will pass on to miscellaneous business; we will have the report from the State Inspector.

Report of State Inspector A. L. Kildow:

REPORT FOR 1913.

Date.	No. Colonies	No. Apiaries Visited	No. Apiaries Diseased	No. Having Am. Foul Brood	No. Having European Foul Brood	No. Treated	No. Destroyed	No. Days	Expense	Incidental	Per Diem	
*Feb.	....	....	....	....	....	....	....	2	$ 8.47	.....	$ 8.00	By Inspector.
**March	....	....	....	....	....	....	....	.....	4.25	.....	.....	.....
April	215	2	....	....	....	....	....	9	12.60	$10.24	36.00	By Inspector.
†May	....	....	....	....	....	....	....	.....	.....	.....	.....	.....
May	17	3	1	....	1	....	....	18	35.83	3.40	72.40	By Inspector.
May	1099	154	93	....	93	5	....	35	.....	.....	140.00	By Deputies.
June	307	7	3	....	3	....	....	9	1.56	.....	36.00	By Inspector.
June	1552	213	77	4	73	30	....	51¾	.....	.....	207.00	By Deputies.
July	358	7	3	3	....	....	....	5	8.08	1.00	20.00	By Inspector.
July	444	44	10	4	6	5	....	12½	.....	.....	50.00	By Deputies.
Aug.	124	10	2	1	1	....	....	5	10.20	1.00	20.00	By Inspector.
Aug.	747	44	2	1	1	1	....	15	.....	.....	60.00	By Deputies.
Sept.	103	....	....	....	....	....	....	5	7.61	.....	20.00	By Inspector.
Oct.	....	....	....	....	....	....	....	.....	4.16	1.00	12.00	.....
§Nov.	....	....	....	....	....	....	....	2 1	4.16	.....	12.00	.....
Total	4966	484	191	13	178	41	....	170¼	$92.76	$16.64	$681.00	Grand Total. $790.40

*Eastern Illinois Convention at St. Anne.

**Supplies.

†Conference with Iowa and Wisconsin Inspectors.

§Convention, Spring, fixed.

Mr. Kildow—I want to state to you the conditions in the state so that you can have a little idea of how things are.

On the whole the state is picking up in the bee business. The bees are on very good increase over past years and the bee diseases seem to be under control to a great extent. I have had less calls this summer than ever, and it seems as though our past teaching—by the inspection work, explaining to men—showing them how to get rid of this foul brood, and our bulletins—all have had a beneficial effect, so that it is beginning to show what we have been doing; there must be in the neighborhood of 50 per cent increase in bees this year over last year, judging from the report; and judging from the report of all the deputies throughout the state, with the exception of a little locality on the east side of the state, foul brood seems to be on the decline instead of on the increase. That is about the extent of my report.

Total number of colonies inspected 4,966
Number of apiaries visited..... 484
Number of apiaries diseased.... 191

Out of these 191, a big majority came

from a little section on the east side of the state, and I am not satisfied with the report from there; I am afraid my deputy there don't know all about it; I am going to make a change.

Pres. Baxter—Was it in Iroquois county?

Mr. Kildow—No, a little below there—Crawford, Clark and Vermilion counties. I am going to investigate that place next spring.

Pres. Baxter—Keep close watch of a place like that.

Mr. Kildow—On the west side of the state, from Knox county up nearly into Rock Island, there is apparently no disease at all.

The number of apiaries having American foul brood, 13.

The number having European foul brood, 178.

On that side of the state it appears to be all European foul brood.

The number of colonies treated by deputies, 41.

Number of colonies destroyed, none.

The deputies didn't have to destroy a colony of bees this summer.

Number of days inspection....	170¼
Expenses .....$	92.76
Incidentals (printing, stationery, postage)	16.64
Total .....$	790.40

The reason the expenses were so little from July 1st up to date is because along the first of July I got a letter from the Governor, asking me to cut everything I possibly could because money was short here (Springfield), and they might not have the money to pay; and as long as I did not have calls, urging me to go to these places, I did not hunt up any work—so that is the reason I have not got much from July 1st until now (November, 1913).

Pres. Baxter—The main part of the inspection work should be from April 1st to July 1st, anyhow.

Mr. Stone—Will they allow you to carry that $2,000 of this year into next year and spend it?

Mr. Kildow—I think not. If I can spend it before July 1st, all right.

The first part of the season, disease did not develop very much, or the bee-keepers were so busy they did not care anything about having any one come—I don't know—I think the two things count—crowded with work, and not much disease showing up, accounted for few calls.

Pres. Baxter—I am under the impression that an Inspector knowing of the localities where disease has existed heretofore, during those months should have a deputy to send down there if he can't go himself, and look over the ground, and see what the condition is, and make as thorough work of it as possible.

Mr. Kildow—One drawback this year—I could not get the deputies to go—they were tied up, and as long as there was no difficulty I did not urge them so hard, but when there was a call I either went or I wrote to one of the deputies to take care of it; there were not many calls and so I did not urge them hard to go.

Pres. Baxter—Under the terms of the law, wherever the Inspector suspects any disease to exist (and where it has existed the year before, he has the right to expect it), he should look after that place thoroughly, I believe, if we want to finally eradicate it from those localities.

Mr. Kildow—Next spring I expect to start in early and go all over this territory.

I find there is not much use in going to the north part of the state unless I get some calls from there. Bees appear to be very few in that section of the country and, unless we get letters from them asking us to call, I do not see much use in going there. I went into the southern part of the state on account of a call and I found very few bees there. It seems like a waste of money to go there unless we have a call from some party.

Mr. Heinzel—Do you get many calls from Logan county—Did you get many this summer? And from Lincoln, from a man by the name of Gale?

Mr. Kildow—I think not.

Mr. Heinzel—He called me to his apiary and I went to him and looked through several colonies; they were as rotten as they could be; I told him to write to you and ask you to come there and inspect the colonies.

Mr. Kildow—No, I heard nothing from him. I got a leter from a man down in Edinburg to come there when I was in his neighborhod, but I had no call to go there so I didn't go.

Pres. Baxter—We want to take note of this man that Mr. Heinzel speaks of, next spring.

H. C. Dadant—Mr. Heinzel has been a bee-keeper very many years and I am sure that what he says must be thoroughly reliable and this place certainly ought to be looked after by all means.

Pres. Baxter—Anything further on this subject?

Mr. Pyles—I think perhaps when I call your attention to one thing—the reason why there is so much European foul brood found in the eastern part of the state and not in the western—is the disease when first found was around near Chicago and through Indiana, and it is creeping steadily and quietly across the border; besides if the bees in Indiana are not kept clean they are so near across the line they come on this side. The first year in inspecting we hardly found European foul brood in any of the counties.

Is not Indiana pretty thoroughly inspected? That is what I understood at least. A Missouri State Inspector told me it was almost impossible to eradicate foul brood from St. Louis and Chicago; he says they always will have it is St. Louis on account of the honey coming from different localities where foul brood exists, and it is exposed to the bees who rob it.

Mr. Duby—I am in a position to know something about Indiana. They have a law there ahead of Illinois; I understand bee-keepers over there cannot keep bees in box hives; they have to be transferred. I occasionally meet people from Indiana, especially the western part, and there is where it is the worst, along the swamps of the river there; they have hundreds of colonies in that part of the state. There are lots of wild bees in the timber, and that is where they have been finding it. They have been cutting down a lot of those bee trees and they have got foul brood pretty well in hand.

I think Indiana is always ahead of Illinois in that respect, although it probably could come over from there into Illinois where they had thousands of bees, and I know some places where they had all the bees destroyed and are starting over again.

Pres. Baxter—If that is the case we can soon eradicate it from the eastern borders of Illinois.

Mr. Pyles—There is one thing I think of along this line—at the meeting a year ago last summer at St. Anne we had a number of Indiana bee-keepers present—and while Indiana may be very thorough in a great many things—I did the best I could do and I thought I had made a sad failure of my description of the different brood diseases—when I found a very small per cent of Indiana bee-keepers who could tell anything about American or European foul brood—and I think this is true with the average bee-keeper.

I am not talking about the up-to-date bee-keeper, but the average bee-keeper—the average bee-keeper in Indiana is like the average bee-keeper in Illinois—if he has got pickled brood he is apt to call it American or European, and if he has starved brood he is apt to call it foul brood.

Mr. Coppin—In case the bee-keepers of Indiana make that mistake and treat it all for foul brood there will be no danger; they certainly will get rid of it; if it was the other way and it was foul brood and they took it for pickled brood and did not treat it properly as foul brood should be treated—they would not be able to stamp out foul brood.

So far as the bees coming from Indiana to Illinois is concerned, carrying the disease, I am not so sure about that; I think we had foul brood twenty or twenty-five years ago—foul brood was bad and cleaned up hundreds of colonies of bees around in the neighborhood of La Salle and Ogle counties; they had the disease there twenty years ago, and more, to my knowledge.

I saw it, and told the bee-keepers what they were up against, so I don't know that it comes from Indiana.

Mr. Pyles—I can see where I have made myself misunderstood. I am talking about the people making a mistake in calling American foul brood European—and the instructions for treating European foul brood are so vastly different from American that, while they treat American foul brood the same way as European, they make a sad mistake: it would be just as big a mistake if they called European foul brood American—and if they called European foul brood pickled brood, and handled it in the same way.

Pres. Baxter—The only way to do is to treat all foul brood as American foul brood and they you will be on the safe side.

Mr. Pyles—One man has European foul brood and is treating it like he would American foul brood—

Pres. Baxter—It is all right when it is done under the direction of an Inspector, but when they are doing it by themselves and don't know any different, they had best take the safe side.

Mr. Pyles—If a man is not thorough in the treatment he may be the means of causing a lot of trouble not only for himself but for his neighbor.

Pres. Baxter—Is the Auditing Committee ready to make a report?

Mr. Moore—We find everything correct.

Pres. Baxter—The next thing in order will be the election and installation of officers.

Election of Officers.

A Member—Mr. President, I move that we nominate the President who is in the Chair, Mr. Baxter, to succeed himself.

Motion seconded and carried.

Secretary was instructed to cast the ballot of the Association for Mr. Baxter for President

Mr. E. J. Baxter was declared President.

Pres. Baxter—I thank you very much for the honor you have conferred upon me in retaining me for another year. I hope that I can be of more service to you in the coming year than I have been in the past; I sympathize with the members of the Association and will do all I can to advance the cause.

H. C. Dadant—Mr. Chairman, I nominate Mr. Moore as First Vice-President to succeed himself in that chair.

Motion seconded.

A Member—I move that each person be allowed to vote for five Vice-Presidents, and the five receiving the highest number of votes be declared first, second, third, fourth and fifth Vice-Presidents, in the order in which they received ballots.

Motion seconded and carried.

Pres. Baxter—I will appoint two tellers—Messrs. Dadant and King.

Pres. Baxter—While the tellers are counting the ballots, I wish to announce that the Executive Committee has seen the Auditor and made arrangements for all of the money necessary to pay the bills that will mature in the next few months.

The Executive Committee have considered the proposition made by Mr. Duby to pay the expenses of a person to attend the Eastern Illinois Convention. They do not see their way clear under the terms of the appropriation to appropriate any money in this way unless the request is to come in the way of a resolution from the Society, duly passed, asking the Society to send them a delegate or a practical bee-keeper to give them instruction in practical bee-keeping and in the treatment and eradication of diseases among bees. Possibly in that way undr the foul brood law they might be authorized to send some one there, or pay the expenses of a delegate; otherwise, coming from an individual, I don't believe we could do it.

Mr. Duby—Would a motion be in order to adopt a resolution?

Pres. Baxter—It would be your Society that would have to pass that resolution and send it here.

Pres. Baxter—It would be too late for this time.

Mr. Duby—About that time we may know just as much as any one belonging to this Association.

Mr. Stone—I have suggested to one of the members that if the bee-keepers of Eastern Illinois would hold their meeting like that, than they could in would be in that neighborhood the Inspector could spend a day at that meeting and it would really be inspection work because they could instruct more members in regard to foul brood and the extermination thereof, at a meeting like that, than they could in traveling a good many miles; an Inspector would have to travel far enough to take in all the members of that Association to accomplish the same result that he could in that meeting, and give them the instruction they desire.

Pres. Baxter—That is a good suggestion; put it in the nature of a field day; have all the members there, and the Inspector there.

Mr. Kildow—Last summer they had field day there; it came at a time when I was tied down home and hardly dared to leave. I didn't feel that I could get away from home; it was at a time when I didn't know whether I was to stay in office or some other fellow take the office, and I was going rather easy until I knew how things were coming out; but, even though I knew I was to stay in office, I could not have gone under any circumstances; that is the reason why I didn't get

there last summer when they had their field day—but, at any time when it is possible for me to get to these places on field days, I will make an effort to get there because it is my business.

Pres. Baxter—In setting field days—if they would communicate with the person they want to be there to assist them, and have him set a day when he can come—it is the one who comes from a distance that should have the preference of the time rather than those around home, because they can always be there.

Mr. Cooper—If there is no other business, I believe Mr. Poindexter has an atricle on bees.

Pres. Baxter—I believe I will wait for the report of the committee.

Mr. Boyd—I would say that I am really interested in bees and have been for the past four years, although I am a young member in this institution. I was at an institution last fall, thirty miles from this place, and I know they have foul brood in that neighborhood. I saw foul brood there. I am quite anxious to learn what I can about bees—that is why I came down here—to learn about bees; it is profitable to me on the farm, and I would like to handle them. I know down below me, about ten miles, there is one man that has lost all his bees; I don't know from what cause; I suspicion it is foul brood; my neighbors, I think, have it. Whenever I move my bees I examine them closely and destroy the hives if they have any foul brood, to keep the other colonies from getting the disease. My bees have not done as well this summer as they did last summer. I came here to learn all I can about bee-keeping. I am in Logan county, near Lincoln; I was formerly acquainted with the Bee Inspector at Lincoln, Mr. Smith, who died, and he gave me information about bees and bee-keeping and I am anxious to learn more.

Pres. Baxter—Next year, you call on our Inspector and have him come up there and inspect that locality.

Mr. Kildow—The worst fault I think I have to find with bee-keeping in Illinois is that they keep "mum" too much; they don't write and tell me where this stuff is; I could find lots more diseased apiaries than I do and I could do lots more work and much more with the money we have to expend, if the bee-keepers would let me know of the conditions as they exist throughout the state. Let them send in their postal cards, by the bushel, I don't care, and I can in this way make better plans and calculations.

Mrs. Kildow—Mr. Chairman, I have been working as Secretary for the Foul Brood Inspector for some time and as such I find out a good many things—and among them is—that the bee-keepers who we suppose would take the bee journals and bee papers seem to pay but little attention to the fact that there is an inspector. In the journals and in the papers of the early spring there were notices sent out and published by those papers, asking the bee-keepers to notify the Inspector of any disease that existed in their neighborhood, and if they are not positive that it exists, but are suspicious that it does, to write the Inspector a letter; and then the Secretary will record it; a note is made of it, and if the Inspector is not at home he will be notified, or the deputies in that locality will be notified.

A record of all these requests is kept in the office for future reference, and if they are sent in they can be acted upon.

Frequently, when the Inspector is away, a call comes in, or possibly comes from the same locality where he is, or from a neighboring locality—and he can be notified, and in this way time and money can be saved.

This was the case two years ago when Mr. Pyles and Mr. Kildow were away. I received word of the disease existing in a certain locality; I notified the inspectors, and Mr. Pyles immediately visited that locality, and car fare and hotel expenses in this way were saved and the inspection work was done promptly.

Mr. Boyd—That is just why I came down here and joined this Association, because I thought I would have more of a right to notify your inspector, or have some communication with him, and otherwise I should stay "mum".

Pres. Baxter—You gentlemen who take that view are wrong: The Inspector is a State Inspector—he is a State Officer, appointed for all the people in the State whether they are members of this Association or not. Every one who has foul brood should not hesitate to write to him at once and ask for his services.

Mr. Heinzel—I would have written to Mr. Kildow myself, but this party I

spoke of promised me he would, and I supposed he would do it.

Mr. Boyd—A man feels as though he were intruding upon this Society if he asked something of it when he did not belong to it.

Pres. Baxter—The State is paying the Inspector—we are not.

Mr. Pyles—There is a good point that this gentleman has made; he felt that he must become a member of the Illinois State Bee-Keepers' Association before he could feel that he had the liberty to call on the Inspector. The Inspector is the Inspector of the entire state, and every bee-keeper, although he has but five or ten colonies, has the same right as the man who has an immense business and belongs to the Association, to call upon the Inspector. We must not lose track of one thing, though, and that is to impress on these people's minds that they can gain a great deal by joining the Association; it is their moral support if nothing else that allows us to go before the State Legislature and enables us to get an appropriation by their being affiliated with us.

Mr. Stone—It is a good thing if they have a pricking conscience. The State Association has done all the work to get the Foul Brood Law to protect the bee-keepers of the State of Illinois, and it makes a man feel as though they were in duty bound to affiliate with such an Association, by becoming a member. The members of the Association ought to have the first right to the services of the Foul Brood Inspector, while we cannot draw any line of distinction.

Pres. Baxter—We will listen to the report of the election for Vice-Presidents—

H. C. Dadant—The committee has to report, as follows, in order of amount of votes received:

Messrs. Coppin, Moore, Duby, Pyles, Withrow and Dadant, tie, both receiving seven votes.

The following Vice-Presidents were declared elected.

Messrs. Coppin, Moore, Duby, Pyles, Dadant.

Pres. Baxter—The next in order will be—the office of Secretary.

Mr. Coppin—I nominate Mr. Stone.

Motion seconded and carried.

A member—I move that the President be directed to cast the entire vote of this Association for Mr. Stone as Secretary of the Illinois State Bee-Keepers' Association.

Mr. Stone—Mr. President, I have had it in mind quite a while to look after another man to hold this place, and I was in hopes you had a good man here; but I will say this—I cannot take the office of Secretary of this Association for the salary; the business is getting so great—it takes me an hour on the average every morning of the year, to answer my correspondence. Sometimes I am until noon; the mail comes in about 10:30, and sometimes the mail man has gone by before I have my letters ready. I have about 700 letters a year in the regular correspondence, and that is not considering the sending out of those blanks for fees—1,200; it takes me three or four days to get those out unless I spend all the time at it; I can write them up in two days and a half or three days.

I was telling the Secretary of our Mutual Insurance Company—I made him a present of one of our reports—and I told him something about the work. He said—"How much do you get?" I said—"My salary is $100." He said—"You Directors pay me $300 for less work than that."

I can't do the Secretary's work for $100. I would prefer to have you find a good man as Secretary in my place. Our appropriation is made from the State Fund with the understanding that there is no salary to be paid to any of the Officers; if you do not find some one—and they would allow the Association to give me a typewriter—there is no man in a State Office who does not have a typewriter, and they would not enter a word of objection to it I do not believe. If it is given in that way it would be taken away from me in case I failed to be Secretary. There is money enough in our Association fund to pay $100.00 for a typewriter; I would pledge myself to act in the capacity of Secretary for two years if I lived, and if I didn't live I would turn it over to the Association. But I would like to have this typewriter belong to me, for the work that I have done in the past. I did this work for many years without receiving any money. At one time the Association owed me $19.00, and Mr. C. P. Dadant made a motion that a collection be taken; and then I suggested the sending out of

letters to all on the mailing list of the American Bee Journal and Mr. York agreed to furnish the addresses—which he did—and I would address the balance and send them out, and now since he has ceased to do that work it has doubled the work on me, and I have it all to do—and furthermore the Association could vote to pay the Secretary $50.00 for making out the report, and it would not come in as salary. They could do that if they wanted to. I don't care who the Secretary is—there is not money enough in it to pay him for the work he has to do; he could not do it for less than $150 and I can't consent to take it without the Association sees fit to make me a present of a typewriter, or move that I get $50 for work on the report.

Pres. Baxter—Gentlemen, you have heard the motion that the President be instructed to cast the full vote of this Convention for Mr. James A. Stone for Secretary for the ensuing year—all in favor of the motion, say aye.

Motion unanimously carried.

Mr. Pyles—Mr. President, it looks like as if we have been hasty or something. As I understand it, the salary of the Secretary cannot be raised during the term of his office; it must be raised before his term of offiee begins.

As I remember, two years ago, when we wanted an increase in the salary of the Secretary, it was stated that it would have to be done before he was elected; it looks as though we got in a hurry in this matter, so there will be nothing else left to do but to vote to buy him a typewriter; that is all we can do; we can't raise his salary now and have it take effect for the coming term of office.

Pres. Baxter—Gentlemen, we don't propose to raise the Secretary's salary; the salary is to remain at $100.00, and this Association, if they see fit, is to make him a present of a typewriter for the use of his office, or they are to pay him $50.00 for getting out the report, which is not a part of his salary at all; that is for extra work.

Or else if you don't see fit to give Mr. Stone a typewriter and pay him for getting out the report he declines the office and you can elect some one else.

Mr. Moore—The secretary should be allowed reasonable compensation for his services; as our Secretary says, there is nothing in the Constitution that states the time for the Secretary's services; you will find in the laws governing the State it provides that the salary shall not be raised during the time of holding office, and it is the same way with any Society—but we have nothing to cover that. We can pay the Secretary anything we want to at any time. Any time we want to vote for an increase in the salary of the Secretary we can do it.

I realize the work is worth more money than we have been paying. I think we should pay Mr. Stone, or whoever is our Secretary, more money. There is an immense amount of labor connected with this work. The ordinary run of members in the Association have very little idea of the amount of writing the Secretary has to do. I have been Secretary of various Associations, and City Clerk, and in different similar offices, and I know from the way the people talk they do not realize the amount of work that has got to be done. They think they are paying a munificent salary, when in fact the secretary, or clerk, is not making the wages of a day laborer considering the time he is required to put in.

Mr. Stone—I want to say, Mr. President, I attend the Chautauqua in August every year, and when I come home home from the Chautauqua I find a pile of letters about four or five inches high, with a weight on top of them to press them down, and I have to sit right down and answer them. My son was away with me this summer so that he was not at home to keep things arranged.

Pres. Baxter—I cast the entire vote of this Association for Mr. Stone for Secretary the ensuing year.

Mr. Kildow—Mr. Stone has been a good, faithful secretary of this Association all these years, and I for one think we ought to pay him good fair wages any way; if we can afford to pay him $50.00 extra or get him a typewriter, I think we ought to do it. I am in favor of paying him for his services.

Pres. Baxter—I think it would be well for some one to make a motion, to provide a typewriter, or pay Mr. Stone $50.00 for getting out the report. This matter can be discussed and voted upon.

Mr. Moore—I think, as the state ap-

propriation is given us for the purpose of getting out the report, the best way would be to vote the $50.00 for the Secretary for getting out the report and doing that work, and then it will come out of the State fund; I think, if we buy a typewriter, that would have to come out of the Association fund, and I doubt if we would have enough on hand.

Mr. Stone—There is $160.00.

Mr. Moore—It would be a good idea to pay him $50.00 to be paid out of the State fund as a remuneration for getting out the State report and then he can get the typewriter.

I will make a motion to that effect—that this Association allow Mr. Stone $50.00 out of the State fund as a remuneration for labor expended in getting out the Annual Report.

Motion seconded and unanimously carried.

Mr. Duby—Don't you believe it would be a good idea to have an Assistant Secretary? Have some one trained to take Mr. Stone's place; I believe it would be worth while.

Pres. Baxter—I don't see where it would come in.

Mr. Stone—Sometimes when I read proof, my wife or son's wife help me in reading, so I don't need any assistant there.

Pres. Baxter—This is settled; now the next thing is the office of Treasurer.

Mr. Kildow—I wish to nominate our present Treasurer—Mr. Becker; he has been our faithful Treasurer, and I wish to make the nomination of Mr. Becker.

Motion seconded and carried.

A Member—I move that the Secretary cast the vote of this Association in its entirety for Mr. Charles Becker.

Mr. Becker was made Treasurer of the Association for ensuing year.

Mr. Coppin—Can we hear from Mr. Poindexter now?

Mr. Poindexter—I supposed there were to be essays read. I have an article.

Pres. Baxter—We will be glad to listen to it, Mr. Poindexter.

"Our Management of Bees in Spring and Summer.

The first thing done in spring was getting the bees on summer stands, which was done the latter part of March or first of April. We would not commence this work until it was fully warm enough for bees to fly without loss. Then close the entrance to all hives in cellar with blocks which confine the bees until we were done taking out and ready to release them.

Our next thing was to look after colonies that needed immediate attention. Then during fruit bloom the condtion of all hives was noted and that each queen was minus a part of one wing. A record of these things was made on back end of hive, making our records as short as possible.

For instance: The first letter of words most used was employed, as, for example: "H" for honey; "S" for swarm; "Q" for queen, et cetera. The plus and minus signs were used frequently. To illustrate: —H showed a lack of honey: +H indicated plenty and some to spare.

These signs showed where to take from the rich and give to the poor; that is to equalize the heaviest and lightest colonies.

The stands which are made of four posts driven in the ground and are now leveled up, and a few nuclei started to rear queens to supply queenless colonies and to supersede queens undesirable.

We get in readiness the supers but are not put on until the honey flow actually begins swarming.

When a swarm issues the queen is caged and put under front part of bottom board and the seventh day after the queen cells are destroyed and the queen released in hive.

If we have any very weak colonies with much empty comb we exchange combs of this hive for those of a strong or swarming colony which results in two good swarms and swarming checked. Giving plenty of surplus room, either for comb or extracted honey, keeps down swarming very materially.

Another method to reduce swarming was to rear queens from non-swarming or those colonies that showed least inclination to swarm, and with these queens supersede queens of colonies much given to swarming.

After practicing this for a fey years we noticed a very marked decrease in the number of swarms issuing.

The above methods given are such as we used in caring for two hundred or more colonies in two apiaries, about equal in numbers, located seven miles

apart, doing all the work alone except when away from home my wife caged the queens and marked date of issue of swarms. These two apiaries we operated for twenty-seven years.

JAMES POINDEXTER."

Mr. Stone—I would like to call for other papers, if there are any.

Mr. Stone—If there are no other papers, and it is not likely there will be any, Mr. President, I move that we decide who takes the first, second, third and fourth prizes.

Pres. Baxter—There being but one paper, I don't think that would be necessary; I think a motion to allow the first premium would be in order.

Mr. Pyles—I move that, as Mr. Poindexter has read the first and only paper, he be allowed the first prize .

Mr. Stone—That is a good paper.

Motion seconded and carried.

Mr. Poindexter was allowed the first prize, $5.00.

Mr. Kildow—It may be that some one would like to make remarks on this paper—something that would bring out some questions, and we could then debate a little along this line.

Pres. Baxter—I believe, according to the terms of that offer, the papers were not to be criticised at all.

Mr. Stone—That is not the intent of it; it says there are not to be any remarks until after the papers have been voted upon.

Pres. Baxter—If Mr. Poindexter will allow it, we will proceed to discuss the point.

Mr. Poindexter—I am very willing.

Mr. Pyles—I would suggest, the way to bring out this discussion is to have each one try to remember what Mr. Poindexter has read, and then write questions, and bring out the discussion by putting questions in the question box.

Mr. Kildow—That does not mean "criticism"; some one may want to know about some point and would like to discuss it before the convention, that that point might be brought out more fully; it is not open to criticism but to discussion. I think this is the only way to get good out of the papers read; then we can get the meat out of the paper.

Question—Does it pay to rob the rich hive to help the poor?

Mr. Coppin—Mr. President, that is one point that I thought about that was in Mr. Poindexter's article—that I didn't altogether agree with him. I am of the opinion it is very often better to leave the rich alone and let them remain rich, and help the poor ourselves. That would be my idea, that the rich have not got too much in the spring to last them until white clover comes; that they need about all that they have—in an eight frame hive; if he used a 10 or 12 frame hive he could rob the rich to help the poor; with an eight frame hive I do not think that the "rich" will have any too much to last them until white clover comes—so that I would help the poor and let the rich remain rich.

Pres. Baxter—Any further remarks? If not we will pass on to the question box.

Mr. Poindexter—I think that is one of the best plans I have ever struck in equalizing two colonies where they are very weak. Where we have weak colonies with much empty comb, I like to exchange the combs of this hive for those of a strong or swarming colony—and this checks swarming.

Mr. Coppin—I was not figuring on bees—I was figuring on honey; Mr. Poindexter is figuring the other way—I was referring to honey.

Mr. Moore—I think that depends a great deal on the hive, as Mr. Coppin has stated—an eight frame hive will very seldom have too much honey; you take it with a ten frame hive, I think it would be quite often to your advantage to take a frame or two of honey and give it to some colony of shorter stores—and if there is any feeding to be done later in the season you can feed them both if necessary.

Pres. Baxter—I am a believer in equalization, no matter what the size of the hive or conditions; it pays to work with the bees; it pays to see that the weaker hives are made strong and that the strong hives are left strong; stimulate them, but stimulate them judiciously, not without giving it thought, so that you will have your brood cheerful; keep them at it; give them all the feed they want, and strengthen the weak colonies with brod and it will pay you big.

Mr. Kildow—It all hinges on one little word—do it "judiciously"; do it when it ought to be done; it all hinges right there.

Mr. Poindexter—I said colonies that had some to spare; now I have had

colonies that had entirely too much hney in the spring and scarcely any room for brood, and then others that had plenty of empty comb and had scarcely any honey.

Pres. Baxter—What hive do you use?

Mr. Poindexter—Eight frame hive, although the frames are a little larger.

Mr. Pyles—I wrote this question; I was curious to know what other people thought about the matter. With me, I have never seen the hives so rich in honey in the spring with the proper kind of queen in that hive that I had any too much honey when the honey flow came.

Pres. Baxter—You come to my house next spring—I will show you some.

Mr. Pyles—I have yet to see anything of this kind, where the queen was strong enough there was not too much honey. I believe that sometimes where there is a great amount of honey and a queen that was too weak in the fall; for instance a young queen that was superseded late in the fall, and had plenty of honey and not bees enough, then it was profitable to change the honey for some brood; that is an equal exchange; an even exchange is, you are giving for what one is long on for what one is short on; but that is not robbing the rich to make the poor strong because your queen will be in fair condition unless reared too late in the fall; but if the queen has had every advantage that the rich one has, she is hardly worth helping; I would rather get rid of that queen and double them together and make my division later and have a very strong colony which might be in better shape than this one we might be helping at that time.

I am a great believer in manipulation, and think you can't do too much of it at the proper time, but I don't believe it is good policy to take a colony in good condition, and then take away the strength from that colony to help up one that is really weak. I would rather give them plenty of feed, and, when it comes the time of year, help the one that is really weak, and have as many colonies as I can in condition to gather honey at the right time.

Mr. Heinzel—I use a ten frame hive, and I found last year, after fruit bloom, a good many hives were clogged with honey so I put an extra case on top and gave them empty combs for the queen to lay in, and by so doing I suppressed swarming considerably; in fact I only had one swarm in the whole yard. Twenty-three colonies and I increased to 47; I made an average altogether of 149 1-2 saleable sections. I think it pays to equalize in that way.

Mr. Poindexter—I do equalizing after warm weather has commenced; after the honey flow.

I take a frame from those that are heavy and give to those that are light, so that both will have enough to do them until honey commences. I don't try to build up the weak colonies that way any more than to keep up the organization until warm weather comes, and then I use them to equalize; it stops swarmng and both colonies build up again right away.

Pres. Baxter—I don't unpack my bees until just before fruit bloom; this last spring I found two colonies in which I had left eight frames that had seven frames entire sheets of honey, top to bottom, sealed, and three frames had brood on. Every cell almost that you could see had brood in them; evidently that queen wanted more room to lay; I took out the good combs and gave them some empty ones, and put them in some other hives that needed feeding. I want to make a statement here of something that puzzled me considerably this fall. A week or two ago when I was taking off boxes I went to a colony that seemed to be a strong colony, had two boxes on it, and there were no bees in the boxes but some honey; just after I had the boxes off they began to drum; I said, why, those colonies are queenless, and I found great batches of brood on several of the combs, and yet from every indication that hive was queenless. I could not find the queen; I took the cloth off the top and here was the queen in a cage that had got introduced. I killed the old queen and introduced that queen. Where did all that brood come from? Without thinking I liberated the queen; she went down to the hive and the bees accepted her; that is something I can't explain.

Mr. Pyles—You ought to put that before the Convention in the way of exciting a discussion; that is a good question.

Mr. Coppin—For my part I don't know where that brood came from without you had a queen there; all the

brood would have hatched in three or four weeks. There certainly must have been another queen; if it was a laying worker it would have been drone brood.

That queen was not laying through the cage and the bees carried the eggs down and put it in the cell?

(Laughter.)

Mr. Coppin—I have had a queen cell or two above the queen excluding honey board and no brood up there, and the bees must have carried the egg above themselves; I had some queen excluders made out of one inch board and the queen excluder was on the underneath side of it and that left an inch space below the bottom of the brood frames and they connected the queen cells on those bottom bars of the brood frames, and I found two or three queen cells on the bottom bars of the brood frames.

Pres. Baxter—Another remarkable thing is after I liberated the queen, they didn't act like queenless hives; they stopped it right at once as soon as she was among them.

Mr. Pyles—I think Mr. Coppin has got the proper answer; that would be my judgment. This year I found one queen cell on the under part of honey comb super, the section sticking down through queen cell there, and that was above the excluder, too. Undoubtedly they had carried the egg above and put it in that cell. Many of you who have caged queens have seen the queens, even after you have placed them in cages, drop eggs.

H. C. Dadant—To the President—Perhaps they were superseding; did you kill the old queen?

Pres. Baxter—I killed the old queen.

H. C. Dadant—It might have been supersedure—killing the new queen and leaving the old one, the old one would still lay a little. You didn't find a queen in there?

Pres. Baxter—No, I didn't find one.

Mr. Coppin—It may be that there was still a queen below (superseding as Mr. Dadant has said) and there might be a young queen, and the other queen being in the cage the two queens could not meet to fight and the bees got acquainted with the second queen and the bees might have accepted her; but later, when the two queens meet, why, of course one would die.

Mr. Kildow—We can't get around the fact there must have been a queen there; you probably didn't see all of them.

Pres. Baxter—Where would it come from when I killed the old queen?

Mr. Kildow—You might have left another queen there or one come in shortly after from some other source—how that queenless noise—that is a little strange why they would make that with that queen there.

Mr. Duby—Maybe Mr. Baxter tried to give us the impression that we will believe some other queen from some other hive was playing the good Samaritan.

Mr. Pyles—I remember an instance where I introduced a queen and two or three days after I found another one there, both in the hive together, but they didn't stay longer than a week.

Question—In inspecting bees, is it necessary to inspect every colony in the community?

Mr. Stone—Mr. President, before we adjourn, unless the Executive Committee was authorized to set a time for the State meeting, we had better decide that by the Convention; the Executive Committee were authorized to pass on the premium list, and ought to get together some time to do that.

Mr. Duby—If there is anything important to be done it should be done before dinner as some are going away.

Pres. Baxter—We have got all the work done with the exception of designating the day of the meeting next year.

Mr. Pyles—We are crowding out the question—but I wlil move that the Executive Committee be empowered to fix the date of the next meeting.

Motion seconded.

Pres. Baxter—As one of the Executive Committee I would rather not have this left to me because if it is left to me I shall urge the other members of the Executive Committee to set the time of the annual meeting during the time of the meeting of the Odd Fellows. I would like to have it, say Thursday or Friday of the week the Grand Lodge meets here; if that meets with your approval, all right; if not, don't leave it with the Executive Committee for decision.

Mr. Kildow—That very thing came up here two years ago and we decided to change it for that very reason. As far as I am personally concerned it does not make any difference to me;

we debated on this quite a little two years ago; the hotels are so crowded at the time suggested by our President, and this made it an unfavorable time to have our meeting; that is the way it runs in my mind; we changed on that account.

Pres. Baxter—You have heard the question—all favoring the question signify it by saying aye.

Motion was carried, to leave date of next meeting with the Executive Committee.

Pres. Baxter—We will now consider the question—

Question—In inspecting bees is it necessary to inspect every colony in the community?

Mr. Coppin—According to my opinion that would depend on conditions; if you go into a location and find a lot of foul brood I would say it would be necessary to inspect right along as they go until they get out of it. On the other hand if you go into a location and inspect the bees there and do not find any, I would say—no, it was not necessary for a general inspection throughout the community; it would kill a great deal of time and it would not be necessary because there are too many places full of the disease that would need attention more.

H. C. Dadant—I want to say if an inspector goes into an apiary and finds the disease more advanced in the weaker colonies, he is liable to find it in the very strongest colonies, the ones in apparently fine shape and producing honey, they have the disease also because it is the strong colonies that do the worst robbing; the disease probably begins in a few cells here and there; it is well if the disease is in an apiary at all to look entirely through it very carefully.

Mr. Moore—You can generally tell pretty closely by the appearance of the bees in the hive entrance as to whether theer is any disease. If the Inspector finds any disease in a colony he should make a thorough canvass of that locality. He should find every colony in the neighborhood and inspect them.

You go into a large place where there are several small apiaries scattered around; they have several small bunches of bees, and you find no disease in the first few apiaries you inspect you can generally put it down pretty safely there is probably no disease in that locality, and it will not be necessary to be so thorough—but where you find the disease in a locality, it should be cleaned up thoroughly.

Mr. Coppin—On the other hand you go into an apiary to inspect bees—I should not go to the strongest colonies to find out whether the disease was there or not. I should say—"Where are your weakest colonies; your colonies that are not doing very well?" The bee-keeper knows where his weak colonies are, and I look them over and if I cannot find any disease there, I would not expect to find it in the strong colonies because the strongest would get it from the weakest. The strongest would get it from the weakest, and I would not expect to find it in the strongest unless it is carried from the neighbors.

H. C. Dadant—In some instances in the strong colonies in a very clean apiary, where the weak colonies are clean, those strong colonies will go a distance and get it from an apiary that have it; you may then find it in the strongest colonies.

Pres. Baxter—I think they should be looked after discriminatingly, the strong and the weak, and having failed to find nothing there you can conclude there is nothing there.

Mr. Pyles—I may be a crank along this line, but I would not give very much for an Inspector if you sent him out through Northern Illinois, and where there was European foul brood, so that it would hardly be noticeable, if he would not be able to locate the colony without opening the hive if the disease was in the yard; he would know it was there. I have never failed yet when going through a yard and watching the entrance to the hive, to locate European foul brood if it was in the yard.

American foul brood is a little harder to locate; it does not work nearly so quick if it works at all. You will find European foul brood becoming an epidemic, where every colony seems to take it all at once and they dwindle down to nothing within a month or such matter, but American foul brood may last on for a period of several years even; several months at least it will be before it gets really bad unless there is a terrible dearth of honey.

It is a question in my mind if you went into Mr. Dadant's or Mr. Baxter's yard and found American or European foul brood and you looked over three

or four colonies, and they could get the idea of it quickly, being thorough bee men—whether it would be right to go through all the colonies, colony by colony. Those men do not intend to have the disease in their place. It surely must be in such an instance a waste of time to inspect colony by colony because it is to the bee-keepers' interest to look after this themselves; it is well to explain the treatment.

If you go into an apiary where a man does not know healthy brood from diseased brood, and would not believe his colonies were diseased if you showed him, you must mark each colony and look after this place carefully. I think if the Inspector is a reasonable man and a close observer, he must be a student of human nature, and when he finds that a man intends to treat his bees it is not necessary to go through every one of his colonies.

A member—I think it depends a good deal upon the condition of things as you find them whether an inspector could tell by looking on the outside of the hive whether or not the disease was there; when they first struck the yard, they might have to look into a few, but after having been in a short time a person ought to be able to tell whether or not there was any disease there by examining the outside of the hive, but I would hate to risk just the outside observation all the time.

Pres. Baxter—If you knew it was in the apiary—

A member—Yes.

Mr. Pyles—That is exactly the point; if you know it is in the apiary and the man is a good thorough man, and you find it there and can explain this matter to him, if he is an up-to-date man, he does not want you to take your time to look over every colony with him; if he is a slip-shod bee-keeper then you can't take any chances on him and must inspect thoroughly. In going through an apiary if I found a weak colony diseased, here, and a strong one, there, I would condemn the entire apiary and look after treating them as though they were all diseased.

Pres. Baxter—As I take it, this question applies not so much to localities where the disease exists as to where an Inspector goes to an apiary to see if there is any disease there. Is it necessary to find out if it exists to examine every hive or not?. That is the question as I understand it.

Mr. Pyles—I think if you examine the weak ones and a few strong ones promiscuously. for European foul brood, and you find a colony with the disease, the next one is pretty sure to have the disease if there is much of it in the community, and the same way with American foul brood.

Pres. Baxter—I will give you an illustration: Up our way a young man discovered a hive with foul brood not half a mile from my home, a year ago last winter; it was dead in the middle of winter; and we burned the whole thing up. I didn't know that there was any foul brood in the neighborhood. I never had it in my apiaries, in my home apiaries, or outside apiaries, and yet this man, who had only six colonies, had one colony diseased; the other five were perfectly healthy—and the question is now does foul brood exist in that community or not.

Now when you come to some of the young bee-keepers, who know nothing about foul brood, would you look at every colony or would you be satisfied by looking in two or three, here and there, and say—"There is none in that district?"

I for my part examine every hive; and I have gone time and time again several times during the season to be sure.

Should an Inspector who goes into locality like that inspect everything, or take it for granted by examining a hive here and there that there is nothing in the locality although there has been a suspicion before?

Mr. Pyles—What kind of foul brood was this?

Pres. Baxter—I think Mr. Phillips prouonnced it genuine American foul brood.

Mr. Poindexter—I have never had any experience with foul brood. I would like to know if there is any way to determine in the winter time when there is no brood in the hive without examination by the scent, whether there is foul brood or not; can you tell it by the smelling it in the entrance?

Mr. Moore—I would say in the winter time there would be very little scent to be smelled at the entrance; you might occasionally, on a warm day if the bees got stirred up so there would be a draft, you might smell it if it was very bad at the entrance;. if you could get a frame out you would find dried

scales in the American foul brood in the cells, but unless it was very bad you would find it hard work to scent it in the winter time.

Mr. Heinzel—I happened to be at a place where they were selling bees and the people who wanted to buy opened up the hives; I noticed dark comb and it looked as though it might be diseased; I smelled the odor plain of American foul brood, and I told the party who owned the brood I thought they were diseased, and he didn't sell.

Mr. Moore—The hive had been opened and the bees stirred up?

Mr. Heinzel—Yes, sir.

Mr. Moore—You take it in that case where the cluster is broken in the winter time, more or less agitation of air, and you get the scent.

Mr. Duby—How can there be any diseased brood when there is no brood in the winter time, take it in December or January?

Mr. Kildow—The old brood is there.

Mr. Duby—They fill those cells with honey.

Mr. Coppin—I should not expect to find any bad odor in the winter time on account of there being no brood and the old brood is dried up; dried down to a scale in the lower part of the cell and surely there would be no smell that would amount to anything.

Mr. Pyles—The odor can plainly be noticed from the scale, I am sure, two years after; that is saying a good deal; in a dried down scale the odor can plainly be noticed. When you get it near your nostrils you will be able to notice that odor, and I don't believe it ever entirely gets away; if the old comb smells sweet and looks sweet I would pronounce it all right (without a scale in the bottom); there are odors of course about combs that are not contagious; things that are not contagious; for instance, a dead bee odor, and so on, but no man that has ever smelled American or European foul brood ever mistakes that smell again; you can just as well think about mistaking the smell of a skunk.

Mr. Moore—You will find, in December, there will be quite a batch of brood in the middle of the frames of hives until after the honey flow comes in so as that brood hatches out there will be plenty of vacant space, and if there is any disease, lots of those diseased cells will have no honey in at all. I don't doubt that in lots of my hives now there are considerable batches of brood in the center of the cluster, and there will be no honey to fill that up, and if there is any disease there it will show in the winter because that dead brood will dry down.

Mr. Pyles—Two years ago, Mr. President, when we went before the Committee, Mr. Kildow went to Spring Valley and got two frames of brood, the 13th of February; the brood had been there from the year before, and it was plainly noticeable; those colonies were dead; had died the year before; it was still ropy.

Question—Are bee-keepers as a rule a suspicious lot?

Mr. Moore—I don't think so. I have done inspection work for several years; two or three years I have had the commission of deputy; in all that time only one man ever asked me if I had my papers with me; if I had my commission.

I would go in a man's yard and say—"I am Deputy State Bee Inspector—I came to look after the bees." "All right, glad to have you." They do not have any suspicion at all.

Mr. Kildow—That will depend on what part of the state he is in. Now I have never been asked if I had a commission, but I have shown my commission, for fear I would be asked.

I think it makes a difference the locality you are in; it seems in the east side of the state the bee-keepers are more or less suspicious.

Mr. Duby—That is where I live.

Mr. Kildow—This question might be written a little differently. Bee-keepers!—now there are bee-keepers and bee-keepers. There are people that the bees stay with, and others who keep bees. I don't know exactly what he meant by saying—Bee-keepers; you take it as a rule, the fellow who keeps a few colonies of bees—take a farmer who has one or two or three colonies, he looks at you with suspicion—he has a suspicious look in his eye every time you go into his yard. The class of people who are keeping bees for a living, or a partial living—the people who are keeping their bees right—that class is not suspicious; it depends on which class is meant.

Mr. Pyles—That class that are not suspicious are in the minority—they are not the rule; there are so few of

them they are not the rule; beekeepers as a rule are a suspicious lot. My observation has been, if you go down through Watseka and Iroquois—that the bee-keepers in that locality are suspicious; I have heard the charge preferred that they were afraid their queens would be stolen. I believe as a rule they are suspicious of every one that comes into their yard and begins to talk about bees.

A member—That question does not say whether a man is suspicious of the bee-inspector or suspicious of the disease among his bees. Some of them look at a fellow as though they thought he was coming in to tear up everything they had. Others—you tell them who you are and they say—"There is nothing the matter with my bees; I looked them over the other day and they are all right." You have got to be a judge of human nature to handle a lot of these fellows.

Mr. Boyd—I don't know that I am suspicious altogether, but I am kind of anxious to know how those inspectors go about this thing, inspecting the bee-yard. Do you open up the hives when you want to inspect an apiary? Do you have some way arranged so that the robber bee does not interfere and carry the disease while you are at work? While a man was examining, the robbers might get so thick they would convey the disease. I am not suspicious only in some ways. I belong to the eastern part of the state.

Mr. Poindexter—I think that the box and frame hives furnish a division line; generally those that keep box hives are more suspicious than those that keep frame hives.

Mr. Pyles—That rule would not hold good in the southern part of Illinois; they have better hives than in Northern Illinois. They have been cheated and robbed in Southern Illinois until they are suspicious of every one that comes in the yard.

Question—What has been the greatest gift to bee-keeping in the last year? Who knows?

Mr. Coppin—What I consider a great gift is a good flow of honey in the State of Illinois.

Mr. Pyles—I hardly call that a gift. I think perhaps the question means—What has been handed out to the bee-keeping fraternity in the way of information?

Pres. Baxter—Or some useful invention.

Mr. Pyles—The thing that appeals to me as the most important thing that has been handed out to the bee-keeping fraternity is an invention for the prevention of swarming—in the nature of a screen wire over the brood frames; prepare a hive body on top of the super above that entrance with three wire comb on; the bees could get out and could not get back in the lower part of the hive. One frame of brood in the upper nest where the bees could go through in the upper but could not get down through where the queen was. Swarming is over at least two weeks under that management; I think that is one of the greatest things, especially for the comb honey producer. It appeals to me, after trying it in a limited way during the last year when swarming was rampant everywhere; that is one of the most practical things I have heard of anywhere.

Mr. Poindexter—Some one has asked me to state that he thinks the introduction of queens by smoking is the most important thing.

Question—How closely related is the drone and queen reared in the same colony?

Mr. Coppin—I would call them brother and sister and be done with it at that; I think that is the quickest way out of it.

A member—We have a doctor here in the house and he claims (and it should be his province to know) that they are half brothers and half sisters.

Question—Is it advisable to rear a plurality of drones in most colonies?

Pres. Baxter—I suppose the gist of that question is:

Is it advisable to raise a good many drones?

Mr. Moore—It depends on what you would consider a plurality of drones. I think during the queen rearing and mating season some drones should be reared, but the colonies ordinarily, unless you take a means to prevent the rearing of drones, will raise too many and some that are not desirable.

If you want to control the male parentage of your bees to transmit some desirable traits, you must control the drone rearing in the undesirable colonies. Ordinarily a colony will rear altogether too many drones and lots of them undesirable, and at a great loss in time and honey.

It takes more to rear a drone than it does a worker bee, and by cutting out the drone comb and keeping it down and putting in worker comb in its place you will have more worker bees and be a whole lot better off in the line of transmitting the desirable traits.

Mr. Coppin—For my part I don't see that the bees raise too many drones. If we furnish our bees with full sheets of foundation frames we are liable to run short of drones as near as I can see without we make some provision to get drone combs and we furnish the bees some combs for that purpose without full sheets of foundation, so that they will build on comb, then, of course, we can control it by keeping track of those combs, where they are, and putting in desirable colonies which we want our drones from; but outside where we use full sheets of foundation all the time, I don't see that we get too many drones.

Mr. Moore—That is a matter that I brought up in the prevention of drone rearing; you let the bees build their own comb and they will build too much drone comb, but by using worker foundation you can control that to a great extent, though I have seen bees tear down worker foundation and build drone comb for storage purposes.

Mr. Pyles—On this question I want to say, I have eliminated drone combs for the past 35 years; we began to use foundation the first thing in 1877 or 1878, I believe. I have been tearing down drone comb and replacing, ever since. It is advisable, of course, where you have a good colony to have the drones from that colony for mating purposes but as a matter of fact you cannot suppress the drones in the apiary—I don't care how careful you are; there are always too many of them.

Mr. Coppin—That goes to show there has not been any foul brood in this locality—if there was you would not have so many combs. In a good many locations the combs have been melted down a good many times during that time and we replace them with foundation; in a great many locations there are not many old combs.

Pres. Baxter—It would be a good idea for a person to import foul brood to get rid of drone combs. I used to be a crank on this line of cutting drone comb, and while I was a crank along that line I was a crank about not getting so much honey as I do now. I do believe that it does not make any difference whether you use full sheets of foundation this year but what next year you will have drone comb anyhow.

As to the bees building comb anyway, if the bee-keeper is a bee-keeper he controls that part of it. If there are good young prolific queens, if you give those bees drone comb, they seldom build where they have part of the drone comb to start with.

Mr. Duby—For the last few years we have been using full sheets of foundation and have been trying to eliminate using drones, and I think we have succeeded well; we have few drones in our yards. I will not agree with Mr. Pyles regarding tearing down of combs for foundations; good bees will not do it; they will build drone cells occasionally in the bottom but very seldom. We have very few drones down our way by using full sheets of foundation.

Mr. Moore—I will say that I do not hive swarms on full sheets; I always hive on starters 1 to 1¼ inches wide; with my system of using swarms I have very little drone comb; so far as the question goes of having them tear down worker comb, I have had them do that myself where they build on full sheets of foundation and no drone comb in the hives, they have torn down big batches of worker cells and built drone cells; there may be a difference in localities.

H. C. Dadant—I don't think I ever saw them tear down foundation to build drone combs but I think you will find in many cases the tearing down was not actually tearing down—it was comb that was cut by wire and was due to sagging that caused them not to be able to make a perfect cell, and then they will build an odd-shaped cell and build drone comb.

Have you ever seen that, Mr. President—the cells torn down and drone comb built?

Pres. Baxter—I can't say that I have seen them tear down excepting at the corners.

Mr. Pyles—What I was trying to get before you was this: I don't know that they tear down for the purpose of building drone comb, but there comes a time when the bees will be switching wax from one place to another in the hive, and take it off the corner, and

when they rebuild they will rebuild it of drone comb.

A member—My experience is that you can fill a 10 or 8 frame with foundation in the fall and you will find plenty of drone cells in there, all that they need from one season to another; they don't tear it down but widen out.

Mr. Stone—Why would it not be a good plan to put drone traps there and catch the drones? I have done that with good results.

Mr. Moore—It costs one-third more to rear a drone than a worker bee. You can rear 1 1-3 worker bees where one drone is reared; why not cut out the drone comb and rear worker bee?

Mr. Coppin—I call that the best thing to do; when in days like these we have foundation.

Mr. Pyles—I have not had a chance to have a meeting with this committee; have the other members found anything we want to offer in the form of resolutions?

I have only found one thing that appealed to me; as a rule the Resolutions Committee are called upon to get a great long lot of resolutions because it shows their ability—the only thing that I can think of is the matter of badges.

Whereas, The American Bee Journal through its generosity and goodness of heart has kindly donated the beautiful badges for this Association; therefore, be it

Resolved, That this Asociation hereby tender a vote of thanks for said favor.

Motion to adopt the resolution was put, seconded and carried.

Mr. Kildow—Might it not be well to get up a resolution asking the legislature to pass a law assessing bee-keepers?

Mr. Moore—I think it is up to the assessors in each township to do this assessing; the law provides that property should be taxed; the assessors in each county get together every spring before the time for assessment, and they fix on the schedule; the assessors have the same rate over the entire county; I don't know how we would get at it to make a state wide affair for the taxation of bees.

Mr. Pyles—When we were before the senate a year ago last winter there were some of the members that were opposed to creating this office of Inspector and appropriating this amount of money; they said the state was receiving no benefit from these bees, and that we were asking them really for a donation; and Mr. Kildow, and I, with others, told them that we were in favor of a specific tax to be levied upon bees of two or three cents per colony all over the state and that would reimburse the state for this money; there is no man having 500 colonies of bees who would not be willing to pay two or three cents a colony; it is only the man who has got the box hive who would object; I, for my part, am in favor of levying a specific tax upon colonies of bees, not upon their value.

Mr. Duby—I think it is only fair and right that we should be taxed for as many colonies as each bee-keeper has; we requested a donation from the state and we got it; we requested protection from the state and we got it; we got help—why not return our appreciation of this fact by turning in a percentage of what they give? This would be comparatively little for each individual. Why not show our good will and help the state in this respect? Bees are not taxable property because it is not listed, but it is property just the same, and we get a return from owning this property, so I think by all means it should be taxed like anything else.

Mr. Moore—Don't anybody think I am trying to get out of this tax; the law says all property shall be taxed at its just value; if these things are not taxed it is because of the laxity of the assessors. I don't believe there is a bee-keeper who would fail to give in his assessment if he was asked, if bees were listed, but it is neglect on the part of the tax assessors, but the question is—how to get at the matter so that it will be uniform. In some counties the assessors do list the bees, and some do not; the law says all property shall be taxed, but where you find bees not taxed it is because the assessor has neglected to ask the party.

Mr. Duby—The assessor is not supposed to ask if you have bees, but, if bees are listed like other property, he will then ask. My bees are not listed and the assessor does not know who has bees and who has not. Even if you are supposed to give all property and bees are taxable, lots of bee-keepers won't give this unless they are

asked; if the word "bees" is on the list then he will give it; some people hide their dogs, but they can't hide bees.

Pres. Baxter—I say that this is impracticable; when you levy a specific tax it costs money, and three cents on a hive in this state would not pay the expense of levying and collecting the tax. Bees are taxed everywhere and if they are not taxed it is the bee-keepers' fault; the bee-keeper is handed a schedule—that schedule says—"all property not mentioned here," and if he does not put in his bees he is swearing to a lie. The assessor requires him to swear to the property he owns and this includes bees if he owns any as well as any other property he may possess. There are hundreds of thousands of dollars worth of property not listed that is owned by individuals. What are you going to do about it?

We are getting the benefit of this appropriation; the state is getting the benefit of our taxes; bees are being taxed in many parts of the state; I think that the bee-keepers are about as honest in giving their property for valuation as generally are other property owners, and I don't see how we can better this condition or remedy it in any way. I think the fault lies with the bee-keeper himself individually and with the assessor because he doesn't consider them worth listing, so I don't see how we will get at this to help matters.

A member—What good would it do bee-keepers to have the bees taxed?

Pres. Baxter—If your bees are taxed you can claim protection. You can say—"I am paying taxes on this property and it is your business to see that I am protected."

A member—I believe it would be a good idea to have on each tax sheet a line specifying bees especially, then we would get credit for having paid taxes on the bees, and if we want to go to the legislature and ask for anything, they could see what we were paying in, whereas the way it is now, "miscellaneous articles," they don't know whether we are paying on bees or not.

Mr. Duby—I understand some poultry associations are trying to add a clause in the assessment list.

Mr. Boyd—I would not know hardly how to get at this matter. I am willing to pay a tax on bees; the law protects us. If a man wants to sell bees or chickens the law protects him.

Mr. Pyles—The only reason that this matter is brought up is that these things have no rating really; if a man has a chicken worth $50.00 and it goes off his place the other fellow can kill it and you have no recourse; that is why we are asking that bees be assessed as property; then you will have protection; he can't kill your horse or your cow, but he can kill your chickens because they are looked at as wild property when they get off your place. I am in favor of fixing it so that we can have them assessed, so that this can be placed on the tax list and the bees be especially listed.

I move that this matter be referred to the Legislative Committee.

Mr. Kildow—It seems to me that we ought to have it fixed so that the assesor is obliged to ask a man to tell if he has any bees, and assess some regular price, and if we get that it seems to me we could go before the legislature and get the things we want easier than we can now; we could demand it we might say; I think we ought to put this before the legislative committee and let them go before the proper authorities and let them get that put on and have it listed.

Pres. Baxter—Gentlemen—go home and think about this; study out some means of carrying it into effect—come back here next fall and tell us just what to do, and, if it is feasible, put it in the hands of your Legislative Committee and have it brought before the legislature; we can't do anything now; Legislature does not meet this winter; we can't do anything until some new legislation has been passed. Think this out thoroughly and effectively and devise some practical scheme that can be enforced—then the Association can, through their legislative committee, do something with the legislature and try and have a law enacted that will meet the purposes.

Mr. Kildow—We will be just as much at sea then as now because we would have to go before a lawyer and have this matter drafted.

Pres. Baxter—Come back with some scheme—

Mr. Stone—We can get a Bill drafted without going to a lawyer.

Mr. Moore—I think you will find it a comparatively simple matter to get this thing fixed up; I think that all that is necessary to do is to go before the proper State Officials who have charge

of printing that list and insist on having "Honey Bees" per colony printed on that list; if any commission has the power to fix an assessed price have them do that, and each one of us go before our County Board of Assessors in their meeting and insist upon their putting a price on honey bees per colony, and insist on every assessor in the county getting every colony of bees assessed.

Mr. Kildow—I would not be in favor of letting that go before every County Board because some assessors hate bees and would do all they could to put a big tax on bees; a specific tax should be designated at Springfield.

Mr. Moore—You can't put a specific tax on them; an assessed valuation might be made to cover the entire state but it varies in different counties.

If there is an official in the state who can fix the valuation of a colony of bees covering the entire state that is all right; otherwise it would have to go before each County Board of Assessors.

Mr. Kildow—I would suggest that Mr. Stone go to some official in Springfield and ask him his advice.

Mr. Poindexter—Could this Association have something to do with establishing the amount that each colony should be assessed at?

Pres. Baxter—Absolutely nothing.

Mr. Stone—I think along that line they ought to consider advice from this Association as to the amount.

Pres. Baxter—The law specifically states all property should be assessed at its value.

Mr. Moore—The fair value is left to the Board of Assessors in each County.

Mr. Stone—Some counties tax bees and some don't.

Mr. Pyles—When this comes up before the State Board of Equalization, these things won't count, the matter of placing different valuations; the State Board of Equalization equalizes this; taxes are raised where they should be and some taxes are cut down that are too high, and I think it could be done in this matter; when we go before the State Board of Equalization we can have these things quite fairly equalized; if the bees in Putnam County were valued at $1.00 a colony and in Marshall County, adjoining, at $.25, the State Board of Equalization would say—"This is not fair" and they would either raise Marshall County or cut down Putnam County.

Mr. Moore—They would not raise the valuation of a colony of bees; they would equalize the entire valuation.

Mr. Stone—In the State Board of Equalization—is the tax in each county according to assessment; the amount of tax that is levied in a certain county, is that levied on the value of the property?

Pres. Baxter—Yes.

Mr. Stone—Or is it levied so that each county has got to pay so much according to land value?

Pres. Baxter—For state purposes only, but the assessment is equalized, that is all; as to the value of the property; if horses in one county are assessed high above others, the State Board of Equalization lowers the assessment.

Mr. Duby—Would it not be time to adjourn now, so that we may find out about the time our train leave? And if we can come back we will do so.

Pres. Baxter—What is your pleasure?

Motion made to adjourn until 1:15 p. m., made, seconded and carried.

Convention called to order at 1:15 p. m. by the President.

Mr. Moore—(acting as Secretary pro tem) There is one thing we have forgotten; that is, to elect a delegate to the National Convention; I will name Mr. C. P. Dadant to act as our delegate this next year.

H. C. Dadant—Mr. Dadant is Treasurer of the National, and I don't know how that would be, whether or not it is proper for him to be a delegate, also.

Mr. Moore—I withdraw my motion.

H. C. Dadant—I place in nomination Mr. Moore.

Pres. Baxter—Mr. Dadant being Treasurer, he is pretty apt to go. Any other nominations?

Pres. Baxter—A motion, then, to make Mr. Moore the nominee will be in order.

A member—I move that the President be instructed to cast the vote of this Society for Mr. W. B. Moore as delegate to the National Convention.

Motion seconded and carried.

Pres. Baxter—Is there anything else of importance? If not, we are still under the head of miscellaneous business; anything that you wish to bring

before the Association will be in order, now.

Mr. Pyles—Mr. Chairman, I would like to ask if one delegate is all we are allowed?

Pres. Baxter—That is all.

Mr. Moore—I would explain in regard to that, we are allowed as many delegates as we wish to elect. We are entitled to one vote for every fifty members in the State Association; if we have 200 members and there is one delegate, he gets four votes, or we can have four delegates, each casting a vote.

We have one vote for every fifty members in the Association; if there is but one delegate, he casts the vote for all.

A member—Does the State Association have to pay the expenses of a delegate?

Mr. Moore—Yes; you see the National has no funds; the National depends entirely on profits they make out of the Review, on supplies, et cetera.

The Convention adjourned at 2 p. m. to meet again in 1914, at the call of the Excutive Committee.

Later the executive appointed E. J. Baxter as alternate delegate to the National Convention at St. Louis.

GROUP OF THE MEMBERS PRESENT AT FIRST SESSION OF THE STATE MEETING.

Front row—left to right—Joseph Hoy, Chas. Hastings, skip two. Jas. A. Stone, Emil J. Baxter, Miss Stewart, Master Leroy Beeler, Mrs. D. S. Beeler.

Second row—Henry C. Dadant, Geo. Seastream, Harry King, G. M. Withrow, H. S. Duby, D. S. Beeler, Dr. A. C. Baxter, W. B. Moore.

Third row—L. E. Pyles, Aaron Coppin, J. W. Newburn, W. H. Gray, J. M. Beeler, W. P. Turner.

CHAS. F. KANNENBERG,
President.

L. C. DADANT,
Secretary.

THE 16TH ANNUAL CONVENTION

OF THE

Chicago-Northwestern Bee-Keepers' Association,

HELD AT THE

Great Northern Hotel, Chicago, December 17 and 18, 1913

was called to order at 10:30 a. m., December 17; the president, Mr. Jacob Huffman, having deceased, Mr. C. F. Kannenberg, Vice-President, took the chair.

Pres. Kannenberg—We will listen to the reading of the Secretary's minutes.

The Secretary, Mr. L. C. Dadant, then read the minutes, as follows:

The Chicago-Northwestern Fifteenth Annual Meeting. Great Northern Hotel, December 19, 1912.

Called to order at 10:30 a. m., by Vice-President, Jacob Huffman.

Secretary read minutes of last meeting, which were approved.

Secretary read report of Secretary Treasurer showing deficit of $1.96.

Moved and carried that Secretary be instructed to place bill for postage and printing against State Association for $20.55.

John Bull gave interesting talk on selling honey—General discussion and question box.

Afternoon session called at 1:30 p. m.

Mr. Dittmer gave an interesting paper on "Helpful hints for packing and shipping beeswax."

Mr. Curtis, of Chicago, gave a short talk on the purpose of the Austin Economic League.

Election of officers. The following were elected:

President—Jacob Huffman.

Vice-President—C. F. Kannenberg.

Secretary-Treasurer—L. C. Dadant.

Mr. Cavanagh gave interesting talk

on "The use of the automobile in our apiary work".

Thursday, a. m., December 20.

Paper from E. D. Townsend read on Limitations of the National.

President appointed Committee on Resolutions, F. B. Cavanagh, C. F. Kannenberg, W. B. Blume.

C. F. Kannenberg read—Which I like best, the deep or shallow frame for extracting.

Number of colonies represented at the meeting was 2459—an average of 153 colonies per member.

Reports of Committee on Resolutions were then read and approved and Secretary instructed to send copies to those interested.

Mr. Cavanagh was elected delegate to the National Convention.

After enthusiastic approval B. L. Boyden and F. B. Cavanagh were appointed to select a suitable memento for N. E. France to show our appreciation of his untiring efforts in behalf of all bee-keepers.

To show what was purchased by the committee I read the following—as given in our report published by the Illinois State Association.

LOUIS C. DADANT,
Secretary-Treasurer.

Pres. Kannenberg—Are there any alterations or corrections in these minutes? If not they will stand approved as read.

Pres. Kannenberg—I have a little report, as Vice-President:

Vice-President's Report.

Members of the Chicago-Northwestern Bee-Keepers' Association and Friends:

I welcome you. A year ago we met here in this hall for the good of our Association and for the Bee-Keepers at large. Today we meet here again for the same purpose, but with some of our members absent, especially our President, Jacob Huffman, who has departed from our midst on October 3, 1913. This news came to me as a shock, because when he was elected as President of this Association he said right in the meeting that he would accept the office because he knew that we had a man from Illinois who could preside over the meeting **when he would not be there;** these very words I have preserved in my mind and cannot forget them.

Today I stand before you as Vice-President of the Association and will try to do my duty that the President has left me to do.

Only the Supreme Ruler of the universe knows who will be here next year. We all know that we must depart some time, as our friend Huffman, and I hope and trust that we will be ready when the call comes to us to depart.

To all bee-keepers—I greet you as Vice-President of this Association and hope you will all have a pleasant time.

C. F. KANNENBERG,
Vice-President.

Pres. Kannenberg—The Treasurer's report will be next.

Mr. L. C. Dadant, Treasurer, then read his report:

Receipts for Past Year.

Membership paid	$60.50
Received from James A Stone, Secretary, the Illinois State Bee-Keepers' Association	20.55
Total	$81.05

Disbursements.

Paid to National Bee-Keepers' Association	$37.00
Paid to State Bee-Keepers' Association	22.00
Postage and printing	16.25
	$87.21
Balance due Treasurer	$ 6.16

Pres. Kannenberg—What do you wish to do with this report?

A member—I move the report be accepted and placed on file.

Pres. Kannenberg—It is so ordered.

Pres. Kannenberg—Is there any one who was appointed on a committee or committees?

Pres. Kannenberg—We will call for unfinished business. Our Secretary has something to br'ng before you.

Mr. Dadant—About last October I received a letter from the President of the National Bee-Keepers' Association, Mr. Burton N. Gates, and I will read what he has to say: He asked me to kindly bring this matter to the attention of "your Society."

"Amherst, Mass., Oct. 29, 1913.

"Dear Sir—The Bureau of Statistics of the U. S. Department of Agriculture has consented to attempt a honey crop report for the National Bee-Keepers' Association at their last annual meeting in Cincinnati. The Bureau desires suggestions for procedure. Would you kindly answer the following questions, making other sug-

gestions which may occur? The sooner this information is in the hands of the writer the greater progress will be facilitated.

It is proposed to have corresponding reporters throughout the country who shall, periodically or as the Bureau may desire, report on honey crop conditions. The Bureau would ascertain:

1. What **"kind of reports** the bee-keepers most desire?"
2. Would you like both the **extracted and comb honey crop** estimated?
3. At what date should this estimate be made?
4. Would you like honey crop prospects to be taken previous to the honey flow?
5. When the harvest is made, would you like a report of the crop of a town, county or state?

I make the following suggestions:

Signed ....

P. O. .....

Very truly yours,

(Signed) BURTON N. GATES,
President."

Mr. Dadant—Mr. Gates stated that it was almost impossible to get reports by mail and that he thought this had beter be taken up at the Association meeting.

You probably all know that the United States Department of Agriculture gives crop reports of grain, wheat, and all that kind of thing, but they have never given us the honey crop report. The Department at Washington has been requested to prepare such a report by the National Bee-Keepers' Association. The President, Mr. Burton N. Gates, wishes us to tell him what we wish done on these questions.

The first question is—"What kind of reports the bee-keepers most desire?"

Pres. Kannenberg—The question is now open for discussion. Does any one want to debate on this question?

Mr. Dadant—It seems to me like this is a rather important question; if we can get some kind of a report from the Government I think it will be of great value to the bee-keeper; the Government has a way of finding out statistics that the ordinary bee-keeper or dealer or commission man does ont have. If we can get them to handle this question, it will be of great benefit both to the bee-keeper and to the dealer, and I do not think we ought to let a thing like this drop. We ought to have some discussion on this and see what is thought about it; I have nothing special to suggest.

The first question is—"What kind of reports"—I suppose they would like to know whether that would be a honey crop report—the condition of bees—or what?

H. H. Thale—They took all this down when they took the census; how many stands of bees and how much honey the bee-keeper had; at the time the last census was taken I had 150 stands of bees; raising 1,800 lbs. of honey; my bees were given to me by my grandfather; I had not done anything with them up to that time.

Mr. Dadant—How long ago was that?

Mr. Thale—When the last census was taken, 1910; that was comb honey.

Mr. C. O. Smith—It seems to me that this question is so important it is very difficult for a man to say very much on it without giving it some thought; it has been sprung on us very suddenly; there are so many things that should be reported that must be left out; naturally it is for us to select the few most important things that should go in this report.

Now while the census takers may have gathered information in certain quarters, where there were bees kept, I doubt if one-half of the bee-keepers were interviewed at all by the census takers with regard to this matter. I don't blieve that anybody in the cities were unless it were some few prominent bee-keepers.

I have seen the statement (I don't know what it was based on)—that there were more people engaged in keeping bees than any other vocation in the United States; that is, there are more people keeping bees than there are keeping chickens. It seemed astounding to me, but the statement was made in some Journal of good repute.

It seems to me that one very important thing for bee-keepers to know is the number of bees and the extent of the industry.

If we can get this before the people of the United States, it will be one important point in advertising honey. A great many people like to go with the crowd. If all of their neighbors are eating honey, they will take to eating honey.

If it can be shown to them that it is a very important industry, they will have more respect for it.

I have talked with a number of men in Chicago, giving them a little idea of the extent of the bee-keeping industry, and they were very greatly

surprised. Thousands of people have an idea that it is something that children ought to handle or some men that have nothing else to do. They do not realize the immense quantities of honey that are produced and the far greater quantity that is going to waste because there are no bees to gather it.

Do you expect to take up these questions that he asks one by one and discuss them in that way?

Pres. Kannanberg—I think that would be the better way.

Mr. Smith—I think I have said all I can say on the first question.

Mr. Dadant—Answering these questions, Mr. President—don't you think it would be a good idea to discuss these questions in open meeting, and then have the President appoint a committee to draw up a list of the questions we would like answered and submit them to the Association?

We cannot expect to answer all the questions we would like to know; that would be impossible.

Pres. Kannenberg—I think it would be the best way to discuss them right here.

Mr. J. C. Wheeler—In regard to members addressing the Chair; would it not be well to call them by their names, so that the rest of us may know who is speaking? We come here to get acquainted as well as anything else.

Pres. Kannenberg—I can do that, we have the names and numbers.

Mr. J. R. Simmons—It would seem to me that the questions are of enough importance, that they ought to be laid on the table until there is a larger representation of bee-keepers present; this afternoon there will probably be more; it seems to me that these questions had better be brought up when there will be a larger representation.

Pres. Kannenberg—Do you make that as a motion?

Mr. Simmons—I make that as a motion.

Motion put to the house, seconded and carried.

Pres. Kannenberg—We will appoint a Resolution Committee. I would like to appoint three on that; I will appoint Brother Pyles—Kildow.

Mr. Kildow—Mr. Pyles and I are from the same place; I don't believe I better serve on that committee.

Pres. Kannenberg—I will appoint—Mr. Pyles; Mr. Blume and Mr. Stanley as a Committee on Resolutions.

Mr. Pyles—Mr. President:—It has been called to my attention that Mr. Burnett will not be here this afternoon; and, while we have a motion here to lay the answering of these questions on the table, I think we better suspend that rule long enough to hear from Mr. Burnett.

I think it would be well to hear from Mr. Burnett on this question of gathering crop reports. He is a man of lots of experience along this line and it will surely be worth our while to listen to what he may have to say.

I ask for a suspension of the rules long enough to let us hear from him.

Motion seconded and carried.

Pres. Kannenberg—We will hear from Mr. Burnett; I will call on Mr. Burnett to speak to us.

Mr. R. A. Burnett—I had hoped this matter would be taken up by practical bee-keepers. Of course our interests are identical in a good many ways.

In regard to this first question—it is so thoroughly compound that to answer it would be to answer every one separately. The gentleman who spoke on the question I think covered the point fairly well in a general sense.

If the Secretary will again read the set of questions I will try to speak on them.

Mr. Dadant—The first question was—What kind of reports the bee-keepers most desire?

The second—Would you like both the extracted and comb-honey crop estimated?

The third—At what date should this estimate be made?

The fourth—Would you like honey crop prospects to be taken previous to the honey flow?

The fifth—When the harvest is made, would you like a report of the crop of a town, county or state?

Mr. Burnett—We certainly would like a report on both the comb and extracted; and as to the date, that would be governed by the locality; the date in California would be very different from the date in Illinois.

Now that is something that will have to be discussed by those who are more familiar with it than, perhaps, I am.

As to the fourth question—"Would you like honey crop prospects to be taken previous to the honey flow?"—

As a matter of fact I don't think they would be worth much previous to the honey flow.

"When the harvest is made, would you like a report of a town, county or state?"—I would suggest to have all of them as nearly as practical.

Mr. Dadant—Make any suggestions you desire.

Mr. Burnett—As to getting the reports—if the government is going to get them they have all the avenues open to them for that purpose as they get them every month; if they get them through the same source as they get their other reports, it would be a matter of little difficulty for them.

As to the date that these reports should be obtained—that would depend on the locality; in California it would differ from the date here.

Mr. Wheeler—I would like to ask a question:

In regard to reports on other produce in the country—Does the Government get authentic reports through the source they now use? Do you consider it good, substantial, and a trustworthy report?

Mr. Burnett—I think it has its limitations. They are gradually perfecting it; it is better than it was some years ago. There are more individuals depending on it than they did ten years ago, to my knowledge. I think they are improving on it. Of course there are people who make reports for their individual interests, but the Government is eliminating that to some extent; wherever they find this is being done, they cut that out.

Mr. Burnett—If this question is open, Mr. President, I don't think the discussion should be shut off; I would like to hear further discussion of it.

Mr. Kildow—I don't know as I can throw any light on this, but it seems to me it would be a good thing if we could have these reports. I would be more particularly in favor of having a State report. It seems like it is very hard to get such a report. I know that last spring when I was in Springfield I tried to get a report of this state from the Secretary down there; it was a pretty hard job. I got a sort of a report but it was not anywhere near what it ought to be.

Our system of gathering reports from the assessors is very poor, it seems to me; some will give the report and some won't; some counties do not give a report at all, and other counties do. When the State sends out their report, it is only about half a report, so you have nothing to go by really.

I would be in favor of the Government reporting on all states, especially your own state.

Mr. Pyles—At Springfield this was up for discussion, and I opposed it on the ground that it was impractical.

For instance—In our township we have a man who is a crop reporter; he is a first class farmer, perhaps one of the best corn growers that I know of. Corn is his business; he knows more about corn than anything he knows about; yet, according to this letter he would necessarily be the Government Crop Reporter, and I know it would not be possible for him to get even an estimate about what the honey crop would be.

In our township we have only two men in the bee business for a living, and I don't believe the other gentleman would wish to hand this information out to people in the community, making this report out for the Government.

As you will readily see—some of the people who are in the honey business must necessarily have out apiaries and we must locate our bees on the farm of somebody else. The minute those people would know to what extent the honey producer was producing honey on their own farm; if he knew the exact amount of honey produced, the rental for the use of that property would go up so high that most of us would have to hunt a new location.

The minute you let people know that there are hundreds of dollars to be gotten off a little square piece of ground, a quarter of an acre in extent perhaps, that land becomes very valuable in the eyes of the owner. They want that for their chickens, or for horse or cow pasture, immediately, unless you pay them a high rental, and for that reason alone bee-keepers are not going to publish their business.

We all would like to know what the other fellow's crop report is going to be, and a good many of us would like to keep our affairs pretty closely to ourselves.

Mr. Burnett—That is a first rate speech—and according to human nature, and how are you going to get around it? The Government can come nearer than any channel we know of.

Every man seems to be willing to know, as our friend candidly says, what the other fellow is doing, yet does not

want to divulge his business; yet publicity is the spirit of the age, and the sooner that we get into harmony with that the better it will be for all of us.

We are going out of the feudal age; we were out of it when we were young, but we can still see traces of that period lurking with us. When I began business it was the fellow who could get the most information as to the quantity of the product that he dealt in, and made his calculations accordingly, that won out in the race of the merchant, and that is the general sense of it. Then began the establishing of the exchanges, the Boards of Trade, so called, and so on, gathering information from all over the country.

The result of that was it was of great disadvantage to men like our friend here who has just spoken, who had the intelligence to get that information without such means; but it helped immense the fellow who could not get that information; it gave him a knowledge of the quantity of corn, for instance, that was produced that year, and if it was a plentiful yield in his locality when in the majority of places it was a failure, he knew that to hold his corn for a time he would get more money for it.

Thus while there are evils attached to our Board of Trade, and et cetera, it levels things up better; and gives the average fellows, the ignorant chap (ignorant in the sense of not having this information) an opportunity to get a little better results for his labor; and I am of the opinion that this thing is coming. We have it in Washington, and, while this is in a sense not in the domain of bee-keeping, it is fair to use it as a comparison.

The moneyed interests of the country at the present time are arrayed against political administration. Now who shall win out? The money changers of the country are hold all the money possible; they are making it difficult for the fellow who has obligations to meet those obligations; they are making it difficult for him to get money to meet them.

I was told here the other day by a man who had to borrow $5,000—that he had to pay 6 per cent for it and 12 per cent premium to get the money.

We must have a more general feeling of good fellowship—get beyond me and my son and my wife's son—and feel that every man is our brother and that he has got to have full share in the results of his labor, and for that reason I am of the opinion that we should get more and more an estimate of what is being done.

It has been very truly said here that what we have obtained we would like to keep, but the other fellow is lurking around and is going to get the knowledge, and if we can't hold our own in fair competition we have got to step aside.

Pres. Kannenberg—Any one else anything to say on this?

Mr. Dadant—Mr. Pyles made the statement that the other fellow would find out how much his honey crop produced. My understanding is that if you make a government report, that it is never published openly. Nobody would know what a particular corn crop or honey crop produced, any more than the knowledge would be made public from a census report.

It seems to me we would be given the opportunity of finding out how much honey there was in the State or in the community without finding out who produced it or where it was produced.

Mr. Pyles—That might be true in some localities but it appeals to me that, in others, the man who produces forty bushels of oats, and the census reporter who makes this report—he doesn't do a thing but tell who had forty bushels and who had eighty bushels of oats. It is the general conversation in certain communities. It may be a possible thing that if Mr. Dadant produced 20,000 lbs. of honey or 40,000 lbs. of honey, nobody but Mr. Dadant would know the exact amount of honey that he produced, even though Mr. Dadant made a report to the government reporter—but in Putnam—practically everybody would know. I can readily see how it would be a harder matter with us to be able to find land to locate our bees on. If we were able to get land as we were thirty or forty, or even ten years ago, but things are different now; you have got to run up against the probability of having the price for rental go up, and I think under the circumstances we would rather keep our knowledge a little quiet.

I can see where this would be beneficial—and that is, for the dealer. He would be benefited very much. I don't believe that Mr. Dadant, or Mr. Kildow, or Mr. Kannenberg or any other

bee-keeper in this country is offering their honey for two cents less than the market price.

I think the commission man will bear me out in this—that when he comes to buy honey he usually gets the price asked and may be just a little bit better than what it is worth; for instance: If the honey is worth 7½ cts., they want 8½ cts. or 9 cts., if they can get it, and nobody blames them for it; but I don't think the bee-keeper who is in the bee business for a living makes the money.

Of course, it is the dealer's business to know conditions and the consumer would not worry himself one minute about what the crop conditions are like, and the small bee-keeper who has 5 or 10 or 15 or 20 hives and only produces a little honey and carries it to market and sells it for what he can get for it, regardless of what it is worth, a crop report is not going to help him any.

I don't see very many that it could help, any more than to present a great lot of facts and figures that could be piled up as a record of what the government is doing. Very few people are reading statistics.

Mr. Smith—Will this question be up this afternoon? I want to say something further, and I have got to be excused now.

Mr. Wheeler—While that point is up in every one's mind—I wish to emphasize the fact of raising the rent; that is a good point; that is a thing that I have found sticks in the crop of a great many people; if they know what the honey man produces they feel that he is making too much of a profit; they don't figure the month after month of work and labor he is putting in getting his hives ready, taking care of things—taking care of his bees and wintering them; they only figure that the time he was occupying his ground was two or three months in the summer; they say "that is an awful profit for them to make."

I have found this very same thing to be true that has been suggested here to-day, and so I say keep "mum."

Mr. Dadant—I don't believe I can agree with either Mr. Pyles or Mr. Wheeler on the question of rent; while there may be some little loss there, I think the knowledge you have of the general crop conditions of honey would far overbalance that.

Perhaps I am a little optimistic on that because we do not rent our ground for our apiaries. We give the man where our out-apiaries are located a share of the honey; if we get a little, they get little; if we get a whole lot, they get more; for that reason we never have any trouble in locating our apiaries.

It seems to me it would be of immense value to bee-keepers who produce honey in any quantity to know what the crop conditions are and not sell honey for two or three cents less than he would get if he held it; it seems to me that this would far outweigh what he would have to pay in the cost of increased rent.

Mr. H. H. Thale—Mr. President, what is honey worth today on the market? This is a short year.

Pres. Kannenberg—Brother Burnett can tell you.

Mr. Thale—I believe if you will look over the prices it is the same as last year. I sell honey at home, wholesale price, 10 lb. pails, weigh pail in, at $1.25; retails to grocers put up in pound jars at $2.00 a dozen; jelly glasses $.90 a dozen; they hold about 6 ounces; glass and all weighs about a pound.

I don't pay any attention to the market because we can sell more than I can raise. I don't believe the bee-keeper will be benefited by knowing what the crop is. Jobbers would take advantage of you; if there was a big crop they would hold off and offer you a small amount of money for your honey because they know you have got it to sell.

As far as the rent being raised by the people who own the farms your bees are on: I pay everybody the same rent; I give them 50 lbs. of honey and do the fencing in myself, and, if they don't like the bees to be there, I move them. I have only moved once; I extracted 2,000 lbs. on his place and he told me he wanted $25.00 if the bees stayed on his place the rest of the season, or I could move them, and I moved them rather than to give him the raise in price, because if I gave this increase in price everybody else would have to pay a raised price, so I moved my bees to a farm where I gave the farmer 50 lbs. of honey, and fenced them in, and nobody has anything to do with it but myself. I be-

lieve it is the cheapest and best way after all.

Mr. Burnett—The gentleman who has just spoken doesn't have to go outside for help; he has the benefit of having everything in the family, as it were. As to this thing of publishing being an advantage to the dealer, that is a very natural conclusion, but I wish to say to you, from my own standpoint, I don't rely on those reports as a dealer; I know what the crop of honey is pretty much long before the statistics are gathered in any sense of the word, so you are not hiding anything from the dealer.

Mr. Dadant—It is like Mr. Burnett says—bee-keepers think that Mr. Burnett and Mr. Dadant and men who buy honey would like to know what the crop condition is.

All dealers who buy honey on a large scale know just about what the crop is all through the country, and they are not going to tell the bee-keeper here and there what the California crop is or what the different crop reports are if they can help it except through the Bee Journals. An ordinary bee-keeper does not get those crop reports except when he sells his honey.

Mr. Wheeler—Mr. Burnett was telling us about the good time coming. I would like to get the information from him as to how he finds out about the crop reports in advance.

Mr. Burnett—By working, Mr. Wheeler.

Mr. Wheeler—That has been a question in my mind quite a while; I knew that Mr. Burnett was pretty wise early in the season, and I would like to know how they find out.

Mr. Thale—They claim they won't tell us; let us not tell them.

Mr. Pyles—Mr. Dadant hit the key note exactly; the only class of people possibly that are going to get any amount of benefit from this is the dealer, and they are not going to pass the information out to bee-keepers—they want the Government to make out a crop report for their benefit, and let us find out for ourselves, and we are willing to take the chances if they are.

Mr. Duby—I just stepped in; it seems to me the dealers are trying to get the upper hand; they don't produce honey and we do; we might get up a little club of our own and get our own market; I think it is wise for bee-keepers to find a market themselves and sell direct to the consumer. I think it is our duty for each and every one of us to get a market of our own independently and regardless of any dealer. First let us get a crop and then try to sell it. I don't believe the dealers can help us in this respect.

Mr. Thale—There is only one way to do it, and that is, to sell your own honey; I have worked the market pretty hard the last few years, and there is only one way to beat it. Cut out the jobbers and sell your honey through agents; that is what I am doing; I don't ship to any jobbing house. I give the agents 10 per cent to sell it for me at $.90 a dozen, put up in nice packages; that nets me more money than to sell to jobbers.

Mr. Wheeler—I have started now I have got to finish up. I started the ball rolling the wrong way. I didn't intend to bring a challenge down on Mr. Burnett because I have dealt with him for forty years; I have sold to him and bought of him; I have found him to be honest from the sole of his feet up sky high.

Mr. Burnett—You don't hurt me—

Mr. Wheeler—And Mr. Burnett is a worthy man to deal with. Another thing you people may find out and that is—this man selling on commission to different men brought this question to my mind—you will find that a great many farmers who ship their honey to men who they think are honest, find that their honey goes to Chicago or Cincinnati or some other city and they never get any returns; that is not the worst of it, that honey is taken and sold to the grocery men and it retails for a song, and not only do you lose the honey but it lowers the crop—the whole crop all over the country—that is done continuously. I run on to honey in grocery stores nearly every day that I am out selling, and the grocery man tells me—"I got a bargain; I paid ten cents (or nine cents) for comb honey." I ask him—"Where did you get it", and he replies—"Down here (such and such a place) a fellow says he got some shipped in." You know that the producer didn't get anything for his honey to speak of. And that honey at ten cents that went into the market lowered the price on everybody else's honey—so don't be too fresh, as you might say, about selling your honey cheap; you will find that you

will lose lots of money; may be not today, or in a week, but the time will come when you will get paid for doing just this thing.

Mr. Thale—I give an agent 10 per cent for selling my honey at $.90 and I am still ahead of what the jobber pays me, and I believe I am ahead of the game.

Mr. Burnett—When Brother Thale first rose, I thought he talked wholly of selling his own crop. Again you have arisen and say you buy your neighbor's.

Mr. Thale—I sell my own honey crop and all that I can buy.

Mr. Burnett—Why don't you buy more? You buy all for sale in your neighborhood?

Mr. Thale—I do.

Mr. Burnett—Would you not be fairly classed as a dealer? Any man that sells more than he raises of his own product, is he not a huckster?

Mr. Thale—I give eight cents a pound for extracted honey; that is what I pay my neighbor.

Mr. Kildow—We have not all of us got a home market, that is one thing sure; we have got to sell some place. I try to keep myself posted and I have not yet been bit; I generally get what my stuff is worth on the general market. I get information froom the best authority I can get and ask that price, and I have never gotten bit. I aim to ask all that it is worth and I have gotten it. Our home trade won't consume my honey by a good deal.

Mr. Pyles—I don't think, Mr. President, the people will think I was trying to condemn the dealer at all. I am only saying this matter would be only especially for the dealers' benefit. I furnish the commission men more honey than I produce; I have told the commission men that if any of my neighbors had honey that would ship it at the same price I did, I would ship it for them; I ship honey direct to the commission man. We must sell our honey to the commission men; I am not condemning the commission man.

Our market would not think of taking the quantities of honey we produce. We are not trying to drive the commission men out of business, although I think he is a necessary evil. I think the world would be better off if we could take care of the honey ourselves. There is a fairly good profit somewhere; I don't know whether it is the commission man or the grocery who gets the big profit—The consumer pays the bill.

I am not trying to drive the commission men out of business, although if I could send my honey direct to the consumer safely, I would do so; but I could not scatter the honey around in Peoria without getting a report of the financial standing of the men to whom I sent it, and I cannot get a report very easily; but I can get it of one or two commission men and sell it to them.

Mr. Thale—Dun & Bradstreet's will give you the rating.

Mr. Pyles—Yes, but it is some job, if you were to send one or two cases of honey to every dealer in Peoria; it would be a great deal more bother than to get a rating on commission men. Perhaps two or three or four hundred grocers would want a case or two of honey shipped to them; the breakage is greater; the damage is greater than if we shipped it in carload lots or in crates; the bother of getting it to the consumer, selling it in small amounts, that is all worth something, and as for selling jelly glasses at 90 cents a dozen, nobody is going to get me to put in my time bottling it up, or selling it at that price; there is no money in it.

Mr. Burnett—I think I have got the idea; you think it is to the advantage of the dealer to get honey crop reports published; it is to the dealer's disadvantage, fair and square. He doesn't care anything about that unless he can do business in a way that I have not found out.

As to this idea of broadening out in general knowledge—it is coming; the school house is doing it; your children are all educated; there are not many of us older ones but have education but our children have more. They are getting the advantage of our labors and efforts. I don't know that any of you would employ help if you could get along without it; some of us must have help, and some of us, to that extent, are teachers. We not only get a profit perhaps if we manage well and have good service, from the efforts of those we hire or have work for us, but we are educating them. I have educated quite a number of people who started in business against me; all they knew was what they learned in

our business; the people they knew were our customers. Often they tried to get our customers or trade because they had waited on them when they came into our establishment. That does not always hold good, and they are not always successful, and oftentimes they go into the bankrupt court. They have not succeeded; and it is not always those who seek to get your capital—who seek to get your customers away from you—that win.

Mr. Thale—The commission men do business and keep the secrets to themselves; nobody is any the wiser as to who his customers are; they do not need to tell that.

Mr. Burnett—You sell honey to people you don't tell about, don't you? If I were going into your town to sell honey you would not give me a list of your customers?

Mr. Thale—Not yet—and you would not give me a list of yours in Chicago.

Mr. Bull—Lots of bee-keepers have got to stop and figure that it is one thing to put up honey and another thing to sell it; there is lots of talk about home trade and sometimes home trade is fifty or a hundred miles from home.

Mr. Thale—My trade is forty miles from home; the farthest place is Kirksville. I sell 25 miles, 22 miles, 16, 10 miles from home; that is what I call home trade. My home town, which is Maywood, Missouri, use 3,000 lbs. of honey, all sold mostly in 10 lb. pails; I deliver honey to them at $1.00 a bucket. I don't believe I could ship it out to anybody and get as much money.

Mr. Bull—You sell it to the grocer for $1.00?

Mr. Thale—$1.00, and they retail it for $1.25.

Mr. Bull—You don't work the retail trade at all?

Mr. Thale—No.

Mr. Bull—In other words, you don't sell to the consumer at all, you are simply a dealer?

Mr. Thale—You can call it what you want to—I get the money.

Mr. Bull—Why don't you sell your honey to some one direct and get all the money?

Mr. Thale—I have not the time; I do all the work myself without hiring help; I raised 4,100 lbs. this season.

Mr. Bull—I got that beat—and sold it all.

Mr. Thale—Our summer was too dry for me.

Pres. Kannenberg—We have another committee to appoint for auditing the books.

Mr. Bull—I get $1.75 for 10 lbs. or $1.00 for 5 lbs.

Mr. Thale—Where do you sell that?

Mr. Bull—Any place where there are people; I sell it all over the country. Let me tell you something—You can sell honey amongst your friends for any price and they will buy it. You drop in a town a perfect stranger and drop into a house and ask $1.25, and see how much you can sell. I will tell you what you will strike; they are used to going to the grocery store and paying 22 cts. and 25 cts. a pound; you are offering your honey for one-half that price. Do you think they will believe you—No. You put that price up to $1.75 you have a chance of selling the honey.

Mr. Thale—Our price is 20 cts. a pound for comb and 12 1-2 for extracted in our home. I don't believe I could see it for $1.75.

Mr. Bull—You might change your mind. Four years ago I was getting $1.40 for 10 lbs. of honey. I tried to sell it at that price one day. The lady to whom I was endeavoring to sell it to, said that honey could not be sold for that money. I did some hard thinking, and I put the price up to $1.60; I sold it at that price, and for the last year and a half I have charged $1.75 and I sell twice as much honey as I did before. If the storekeeper can sell honey for $.20 and $.25, why can't we get that much for it? The only reason we don't get more money for honey is because we do not ask it.

Mr. Duby—That reminds me of a little incident: Some years ago I had a hobby of making a display at the Fair. I went to LaFayette County, Indiana, and I had the privilege of selling all the honey I could. There was a big crop of honey, and I was a stranger and thought I would introduce myself. I made a start selling comb honey at $.12 1-2; two for a quarter. The first day I don't believe I sold ten pieces. Then I said we are going to see at $.15 straight. The day before we could not sell but ten pieces, and when we sold for $.15 straight we had no trouble in selling it. My impression sometimes is we are wrong in that we don't ask enough.

Mr. Thale—According to that I believe Mr. Dadant sells his too cheap at $1.15 wholesale.

Mr. Dadant—$1.25 retail.

Mr. Thale—You are too cheap.

Mr. Bull—I have a neighbor about five miles from me who sells it to the stores in little towns of about a couple thousand population; he sells it in 10 pound pails and those stores retail it at $1.25. I go to the same town and sell honey at $1.75; I sold 120 lbs. up to two o'clock on one day. Do I make any money on that?

Mr. Thale—You possibly did.

Mr. Bull—Why do people pay me a big price? Every one gave me what I asked; not one fell down; after you sell honey to the consumer direct you learn a whole lot.

Mr. Dadant—If you sell your honey to the consumer direct, talk to him face to face, you can get more money for your honey. Nearly all of our honey is shipped or sold to those who come and get it; we don't try to work up the retail trade at home. Mr. Bull has the right idea.

Mr. Bull—Too many people don't make enough difference between wholesale and retail.

Mr. Thale—I took a stand that I could not wholesale and retail and hold both trades, so I sold to the grocery man giving him a good percentage of the profits, making quick sale without much expense of selling.

Mr. Bull—How have you been selling your honey?

Mr. Thale—I get $1.20 for 10 lbs., wholesale.

President Kannenberg—We will cut out the questions now, and give everybody a chance to pay their dues; and then we will adjourn until 1:30.

Mr. Pyles—I move that we adjourn now until 1:30; and in the meantime, after adjournment, the members will have a chance to pay their dues.

Motion to adjourn seconded, put and carried.

FIRST DAY—AFTERNOON SESSION.

The convention was called to order by Pres. Kannenberg at 2 p. m.

Pres. Kannenberg—The first thing to do this afternoon will be the appointment of the Auditing Committee. I appoint on that committee—Mr. Bull, Mr. Marshall and Mr. W. C. Lyman.

Pres. Kannenberg—We have some papers to be read. There is one on—

A NEW KINK IN BEE FEEDER.

Thale's Regulative Vacuum Bee Feeder.

(By Mr. H. H. Thale.)

I have here a feeder; there are quite a number of feeders on the market of various designs; this feeder is one of my own invention; it feeds inside the hive, directly underneath the cluster, and will feed in cold weather when other feeders will not.

The amount of feed can be decreased and increased by moving the slide, one, two, or three perforations or full capacity of the feeder. With a fair sized colony the feeder will feed from four to five days; if the weather is warm.

The feed is put into the bottles at home and is taken to the bee yard in the bottle, all ready to put on.

No feed can be wasted in transit to the bee yard. Then lift off the empty bottle and set on the full one. When the bottle is inserted in the feed pool the cork strikes the bottom of the feed and unseats the cork in the neck of the bottle and lets the feed down into the feeder without spilling a drop. The bees can be fed at any time of the day without causing robbing or excitement and the feeders can be filled any time of the day, morning, noon or night, without causing robbing or excitement; (as the bottles are placed outside the entrance of the hive).

This is a practical, stimulative feeder, designed to feed the bees slowly or in any quantity you desire them to have.

You don't have to visit the bee yard every day; you fill the feeder say twice a week; set the feeder at "slow feed," and it will feed continuously for four days; if you set it at ½ pint that would require two fillings a week, enabling you to feed quite a number of out-yards without visiting them every day, and feed them the way you want to.

For the syrup I make two parts water and one part sugar; feed a half pint say or two bottles a week.

This is a close imitation to a natural honey flow. I have used all the popular feeders, such as the Boardman and Alexander feeders, and you have to

fill those at night or else the bees will be robbing.

This feeder is easily placed on the hive.

You raise the entrance of the hive and push the feeder underneath and the feeder will stand firm. The feed pan is made exactly the same thickness as the entrance to the bee hive; 3-8th of an inch thick and 1 1-2 inches wide. The weight of the hive rests firmly upon it; it cannot twist or fall or get out of position.

I have used this feeder in just the design this is for two years. I used this feeder all last summer and for a little while this fall. Two years ago I designed it; then used it all summer on 200 colonies of bees, and found those bees were the ones that gave me the most honey; I averaged 56 pounds of honey this fall off of them, but our season was a dry one, so I could not give it a fair test.

I find this a very convenient way of feeding, and it is practical and will produce more brood than any other method I know of.

I have some circulars here describing this feeder that I would like to pass out.

Mr. Perry Russell—How about freezing weather?

Mr. Thale—It is hardly practical to feed in freezing weather, but this will not burst the bottle since the syrup is harder to freeze than pure water is; I never feed in zero weather.

Mr. Burnett—Did you have any trouble in getting the bees to use it during the honey flow?

Mr. Thale—They will slow up on it. It is not practical to feed during the honey flow by a stimulating feeder, but this feeder is ideal to feed back honey to finish sections as you can feed, fast or slow.

Honey that you extract from weak colonies that would not work on sections and feed it to strong colonies, thereby putting all honey in the sections.

Mr. Burnett—There is another question:

Did you have any trouble in getting the bees to use it in the early spring?

Mr. Thale—No, sir. Bees will go to feeding on this feeder before they will on any other feeder, either above the frames over the cluster or entrance feeders.

The Boardman feeder feeds at the entrance but outside of the hive, while this feeder feeds underneath the cluster.

At the first signs of life, or when the bees get warmed up to activity, they will take hold of this before one placed in the hive or on the top of the frame.

Mr. Duby—Is this feeder on the outside or inside?

Mr. Thale—Set on the outside of the hive; the bottle is totally on the outside of the hive. The feed pan enters the hive and feeds the bees inside directly underneath the cluster.

The bottle is filled from the outside and without coming in contact with the bees.

With the Boardman, the bees come outside and feed on the perforated top while with this feeder they feed on the perforation on the inner end of the feed pan.

Pres. Kannenberg—Does anybody else want to ask any questions of Brother Thale?

Miss H. C. Holmes—Can the feeder be slipped under the entrance without raising the body of the hive?

Mr. Thale—You have to raise the body for the flanges that are on top. There is a bottom bar and then a space—this point (indicating) is to guide you where the space is, so you have perforations directly underneath the bee space in the frame.

The bees would have nothing in the way to interfere with them from going down between the frames on to the feeder.

Mr. Dadant—Did you make any test between one colony and another when feeding with this feeder and when feeding with some other feeder?

Did you keep any comparative test as to how much honey you got from a colony?

Mr. Thale—I never used any other feeder except the Alexander and Boardman. I fed them the same quantity. Outside of the amount of work it requires to fill the Alexander and Boardman feeders, and the time of day you have to fill them, which is at night—that was the only difference, in addition to getting your fingers stung.

This will not produce, I don't think, any greater amount of brood than the Alexander or Boardman if you feed them at the same time. At night you can only feed one yard.

I used the Alexander and Boardman at my home yard because I did not have enough of my feeders. I could not see any big difference in the amount of brood that this one produced outside of the amount of time it saved in the convenience of feeding.

This feeder (indicating) run two bottles a week and the bees had feed continuously, while at the home yard with the Alexander and Boardman feeders I had to feed them every night and then had to hurry around and get it done about sundown, or else it would cause robbing and excitement.

Mr. Duby—How many bees can work?

Mr. Thale—I could not tell you the exact number. They can empty the feeder within three or four hours if the feeder is open to full capacity, or it can be reduced to a slow feed and the bottle of feed can be made to last four or five days. I never counted the bees.

Mr. Bull—How much does this feeder hold?

Mr. Thale—One quart.

Mr. Dadant—How do you work it on a 7-8 in. entrance?

Mr. Thale—By putting a one-half inch block on top of the feed pan. This block and the 3-8 in. feed pan fills a 7-8 in. entrance and the weight of the hive rests on top of the block and holds the feeder firm in position the same as it would on a 3-8 in. entrance where no block is used.

Mr. Wheeler—Would that run out in four hours if no bees were there?

Mr. Thale—No, sir, the feed pan stands level full up to the perforations. It will not feed until the bees are actually taking it out. The feed stands there the same as water for chicken water.

It would not be practical if it would run like a lubricator on an engine. The bees not working, it would waste it.

If the bees take it they can have feed; if they stop for any cause, it quits running.

You can pull the feed slide wide open and feed two bottles a day, or possibly three if you watch it and refill it when it gets empty. I make this so it will act for all purposes; you can reduce it down to a small feed or regulate it for a large capacity.

You could put large bottles on if you wanted to, but I don't think it is necessary to put on a larger one than one quart.

Pres. Kannenberg—What do these feeders sell for?

Mr. Thale—In lots of less than ten, $.35. In lots of ten or more, $.30 a piece. Ten cents extra for extra bottles.

It is necessary for a man if he had fifty feeders to have at least 25 extra bottles, so that he can take out a bunch of bottles already filled.

If you had an out-yard of 100 stands of bees it would be necessary to have one hundred extra bottles. Take them out and fill them at home, and change your bottles. You can feed all your bees with regulation.

Mr. Bull—Did you have any trouble in breaking bottles, in bringing them back and forth?

Mr. Thale—No, I have a case to put the bottles in; a case 15½ inches long and 11 inches wide, to hold a dozen. I have twenty cases like that, and load them up on a wagon as rough as you handle anything, and I never did break a bottle, unless I dropped it.

These bottles are pretty heavy and they hold pretty well.

Pres. Kannenberg—Does any one know of anything better?

Mr. Stubing—I think it best to stop feeding entirely. I have kept bees for 65 years.

Mr. Wheeler—I have been through that and have had quite a little experience along this same line, and I have been wondering if the older bee-keepers had not made up their mind long ago to quit feeding and give the bees honey—stop giving them glucose and sugar, and let the bees eat their own product?

I have been all through this stage and I don't do it any more. I don't think we should patronize the glucose and sugar factories.

I don't want this statement to reflect on Mr. Thale's feeder. I think that is a good feeder. It is simply the question of the idea of feeding. I like his idea of a feeder, but Mr. Stubing raised the question as to whether it paid to feed, and that has been my experience.

Mr. Thale—I don't see why it won't pay to feed. I use the feeder and I use it right along and have used others before I got up one of my own.

I have never seen a colony of bees yet but what showed they were more

lively, more ready to work, and put more eggs in the hive if you fed them a small quantity of syrup daily.

As long as the bees are not storing they are more or less in a state of idleness. I don't believe all the honey in the world in the hive would do them any good toward stimulating if there were no stores coming in, no pollen or feed coming in. I don't believe they would breed up to be very strong colonies if they didn't get something from the outside.

I have fed from other feeders, but you have got to feed the bees every day, and if you don't, at sundown or late in the day the bees are going to get excited and rob weak colonies.

While I don't believe I have discovered anything that is any better than anybody else's feeder except that you can feed in a most effective way, still I do believe that I have discovered a way of putting the feeder on without coming in contact with the bees—and a feeder that is easier to handle.

You can control the flow—and I believe, all things considered, a colony, no matter how much honey they have, if they have any room to lay eggs in, if fed a small quantity, will lay more eggs.

The bees must have feed. If they haven't any feed, only what you give them, you have got to give them more than a half pint a day.

I always have twenty-five or thirty pounds of honey in the hive every fall, and then commence feeding as soon as they commence gathering pollen, and I continue feeding until the honey comes in.

Considering the dry weather I had, and the hard time I had to get through with my bees, I think I did pretty well.

Say put this feeder on the last part of July, and keep it running until heartsease and Spanish needle begin to bloom, you can gather 15 or 20 pounds more honey if you feed than you could if you did not practice stimulating feeding.

Mr. Pyles—Mr. President, I do not wish to interfere with anything on your program—but the Resolution Committee, through the suggestion of Mr. France, has a resolution covering the death of our late President which we think at this time it would be well to offer:

Resolution on the Death of Mr. Jacob Huffman.

Whereas, The Supreme Ruler of the Universe in His Allwise Providence has deemed it fit to call from our council our beloved President, Jacob Huffman; therefore, be it

Resolved, That we, The Chicago-Northwestern Bee-Keepers' Association in convention assembled, do hereby express our sorrow at the loss of our beloved President, that the bee-keeping world has lost an able councilor who will be hard to replace, and, be it further

Resolved, That a copy of these resolutions be spread upon our minutes—that a copy be sent to the family—and that the chair be draped in mourning during the time of this Convention.

I. E. PYLES,
ARTHUR STANLEY.
W. B. BLUME,
Committee.

Pres. Kannenberg—You have heard the reading of this resolution, what is your pleasure?

A member—I move that it be accepted and placed on record.

The motion was seconded, put and carried.

Mr. France—Before going on any further: As your deceased President was a neighbor of mine, and as a brother bee-keeper, I have brought with me a piece of crepe to be placed on the chair.

(The crepe was so placed.)

Pres. Kannenberg—We have another paper to be read by Mr. John Kneser—"Does it Pay to Buy Bees by the Pound or Half Pound?"

Does it Pay to Buy Bees by the Pound or Half Pound?

By John Kneser.

In the case of winter losses or under certain conditions where one has plenty of hives, combs and honey, there is no better way to buy bees than by the pound or half pound. There are a number of arguments in favor of this:

1st. Light Express Charges. When the total weight of ten half pound packages is only about thirteen or fourteen pounds you can readily see that the express charges will not be high.

2d. Freedom from Disease. It is claimed by our best authorities that it is practically impossible to transmit foul brood in the pound packages.

3d. Securing Young Bees in Early Spring. In this way young bees can be secured from the South during April

and May, and thereby, if conditions are favorable, build up strong colonies for the June or July flow.

4th. Quick Shipment and Safe Arrival. All bees shipped to us in packages arrived in excellent condition.

5th. Cost of Bees. **As a rule** bees can be bought cheaper this way. The usual price without queen is from 75 cents to $2.00 for half pound packages, and from $1.25 to $3.00 per pound, depending on time of season.

In conclusion I would say that I don't think it advisable to buy bees by the package where one has no hives or frames. In this case buying full colonies guaranteed from disease would be better.

Mr. Kneser—What do the members think about that. It is better to buy bees by the pound or half pound?

Mr. Pyles—I had the honor of calling upon Mr. Kneser at one time and I saw some of his work that he tells us about. I was much impressed at that time with the effort he was putting forth and the results that he was obtaining.

Mr. Cavanagh—I would like to ask Mr. Kneser as to the peculiarity of his location, and as to the results he secured in his location in using half pound packages of bees on combs.

Mr. Kneser—We received those half pound packages late—the latter part of June. The results were very favorable. If we could have secured them sooner we would have produced enough honey to pay us—if we had ordered them earlier.

Mr. Cavanagh—You have a fall flow?

Mr. Kneser—This year we didn't; last year we did. I am speaking of last year.

Mr. Dadant—Did you not find the bees shipped by the pound and half pound livelier and that they seemed to work harder than the colonies you had in your own apiary left over from the winter?

Mr. Kneser—Yes, I did.

Pres. Kannenberg—We have a few questions here:

Question—Is there any difference in food value of the different kinds of honey for either bees or mankind?

Pres. Kannenberg—Has any one anything to say on that question?

Mr. Dadant—Mr. France, didn't you have some samples sent to Washington, D. C., for analysis at some time? Was there anything in the matter of food value given when they were analyzed? Did they give you anything definite?

Mr. France—It was the value of keeping honey. Some of it was over thirty years old. We were comparing it with fresh honey.

Mr. Stone—There is certainly a wide difference in the value of honey; take honey dew and white clover for instance.

Mr. Wheeler—Those are not both honey.

Mr. France—The food value so far as the bees are concerned, generally speaking either one will fill the bill, but we find that late honey, or fall gathered, especially from buckwheat, contains an excess of pollen, the result is danger in feeding, whereas our early honeys not having that pollen it would be safer for winter feeding.

A few years ago while attending a New York convention, two of the most extensive bee-keepers of the state were at the meeting.

At the close of the meeting we had a banquet, and New York gilt edged comb honey. In a toast I replied that I would be quite anxious as to the outcome of wintering my bees if they had to winter upon honey like that.

One who had bees by the hundreds of colonies immediately took my statement to task, and he said that "We have wintered our bees on buckwheat honey like that for years."

I replied—"It may look like that, but the grain of pollen is that thick in this honey, it is readily detected by the taste, and you can with your finger feel it."

I asked him to report to me the next time we met what per cent of his bees wintered, and I learned that 72 per cent of them did not winter.

Mr. Smith—I would like to ask a question. Would that be good honey to feed in the spring?

Mr. France—That would do all right to feed in the spring.

Mr. Wheeler—Did the question read, Food for bees, or Food for men?

Mr. Dadant—Both.

Question—Are the germs of European foul brood transmitted by honey?

Pres. Kannenberg—The Inspectors ought to know.

Mr. Pyles—Just to start the question, I will say, "No."

Mr. E. S. Miller—All of our Bureaus of Entomology say, "Yes."

Mr. Pyles—To finish that I will say, No, and will Mr. France explain it?

Mr. France—As yet we are all in the dark. I doubt if any one knows positively. If it were the honey, we would go at that as a source of remedy, and we don't do that. Keeping the same hive, with the same combs and honey, and removing the queen, replacing with good Italian stock, and the disease disappears. Now if it were in the honey, why?

Mr. Cavanagh—I was not paying strict attention; I believe Mr. France the question was—If the disease were in the honey—If the disease were in the honey in European foul brood why would this disappear when Italian blood was introduced? For the simple reason that the Italian stock is more resistant than the disease. I regard that as a proof that the disease is in the honey because you can take the honey from a diseased European foul brood hive and produce it from black bees, but not Italian bees, showing that the Italian bees resisted the diseased germs there. We notice in a European foul brood hive with Italian stock introduced, we find larvae producing bees more or less weakly all through their existence. We have bees there that are sickly; they are like skimmed milk calves; they don't attain a very robust constitution.

They are never very good workers—while the Italian colony finally overcomes this and becomes vigorous. It is not because the disease was not in the honey but because the Italian stock resisted it and finally the disease disappears because the honey is exchanged and the diseased germs are removed.

I would not be afraid to have good Italian colony with young queen and have honey with European brood germs in because they resist that, and the chances are very few of the larvae would die with that disease; a few would be more or less weakly, but in the main they would throw it off and resist it entirely.

Mr. Pyles—I cannot quite agree with the gentleman on that, for the reason that I know of a number of cases where there was a good case of robbing, when the bees were not all Italians by a good ways and there were no bad results from it; it looks to me it is not all in the Italians.

Mr. Wheeler—There has been a question in my mind I would like to have settled. I would like to know of Mr. Cavanagh if he is interested in the sale of Italian bees. I notice that he has been for several years talking along the same line.

Mr. Cavanagh—I am not interested in the sale of bees at all. I do not mean to say that the Italian bees are the only resistant bees—Cariolians or Cyprians are equally resistant.

The black bees we have in our neighborhood have not proved to be very resistant. I believe there are plenty of black bees that are equally resistant as the Italians, but in my locality black bees are very susceptible to disease. Almost any strain of Italians seems to be resistant.

Mr. Pyles—The first time I ever saw a case of European foul brood was in Grundy County, in the apiary of Mr. Frank Shupe. He has a good strain of Italian bees. A great many of those queens were bought of Mr. Strong of Clarinda, Iowa, and I believe they are very good bees. He had a very good strain of Italian bees, and I believe that was the worst cases of European foul brood I ever saw in my life—and they were Italian bees.

I have had some European foul brood in my own yard. A year ago this last summer, Mr. Kildow and I were buying queens of Mr. J. W. K. Shaw of Louisiana, and a very good strain of Italian bees we thought we were getting, and are satisfied yet that we were.

I had been in the spring, early, down in Williamson County in the state inspecting bees, and found a man who claimed to cure all of his colonies by removing black queens and introducing Italians—so I thought I would give that a fair trial, and I introduced a new queen in place of the old black queen; others were introduced as soon as it possibly could be done, and I found that the disease thrived as well on Italian blood as on black blood, but when I took the queen away and allowed the same brood to rear a queen of their own, the disease disappeared.

Dr. Miller seems to have hit upon the right idea—that by making a break in brood of sufficient length that it will prevent the adult bees from sucking the juices from the dead and feeding it to the healthy larvae, then you

have practically brought about the cure of the disease.

In his judgment the bee is like a good Dutchman.

A good Dutchman saves everything that possibly can be utilized.

The bee is as near to that nature as it is possible for anything to be; consequently when the diseased larvae dies, the juices are sweet and they simply suck away the juices from the dead larvae and feed it to a healthy one and the disease is carried in that way.

This is Dr. Miller's theory but it looks so good I must give it my hearty endorsement. If you make this break sufficiently long enough the adult bees carry it outside and the sun and fresh air through their action destroy the germs.

Mr. Cavanagh—I cannot agree with Mr. Pyles. Now I have a theory that I have been foolish enough to keep to myself for a little while, about European foul brood.

In the first place, in regard to Italians being more resistant than others:

My first experience with foul brood (European) was—I may say my worst experience with European foul brood was in an apriary filled with Italian bees, and Mr. France knows where those bees were taken from.

Those bees were very well bred. They were badly diseased. I don't think they went into any other hives and sucked the juices of European foul brood larvae. No doubt it was from hives that had been left exposed; for that reason I think there are other ways of bees procuring contagion.

Another reason that the theory of contracting diseases by sucking the juices of larvae may not be correct, is that Italian bees will frequently, and almost always, gradually overcome the disease when larvae is present, and they will completely cure themselves in a majority of cases when proper blood is introduced.

I wish to introduce this theory for what it is worth, that is, European foul brood, like other diseases among other animals or insects perhaps, is it not possible, or probable, we might say, that in having this disease at a certain time and practically overcoming it, it acts as though they were vaccinated, and the bees themselves or the larvae become more resistant to the disease, and in that way overcome it?

Would that not account for the fact that when young queens are reared and you have new stock, is it not possible those bees thus are more resistant and are able to overcome the effects of that contagion which we of course admit is present?

Mr. B. F. Kindig—I did not intend to take part in this discussion as I am only a visitor here, but it looks to me as though I saw quite a flaw in Mr. Cavanagh's statement, for this reason: If a queen of which she is the mother of the bees in the hive were to have foul brood in her larvae, and then recover and become a mother of a colony, I think it is pretty firmly established that the theory which Mr. Cavanagh has given us would be correct, but I question whether there are many queens that have foul brood in their life.

It has been thoroughly established in the animal world that hogs recovering from a case of cholera will be immune from cholera thereafter, and will transmit that immunity to their offspring.

That thing has been established in the human system to a certain extent. The Caucasian race compared with the Indian are considerably immune from tuberculosis.

I belive the great thing in favor of the Italian bees is that they are husky for one thing and will clean up where black bees will not clean up. I believe there is an immunity that comes with the Italian race, but it seems to me instead of coming from the mother, it comes from the father to a certain extent.

I know in my experience as Bee Inspector, I am positive in my own mind, the Italian bee is the bee in the European foul brood locality.

I unhesitatingly urge and recommend to those who have black bees and have European foul brood, to replace by Italians as far as possible to do so. I am satisfied that this is one of the things to do—one of the best things to do. I have watched the effect of this kind of work.

Mr. Cavanagh—I advanced this theory and must defend it. Mr. Kindig fails to take into consideration the fact that, admitting for present argument if you will that I contend that European foul brood is transmitted

with honey, I believe that all the larvae or practically all of them receive more or less of contagion in their food, and that also the queens do and queen cells, and we know the queen cells themselves are effected.

If some of them receive it, it is reasonable to suppose that all of those queens receive it and possibly are more or less effected by the disease.

Now of course this theory doesn't amount to anything really that I can see, but is it not reasonable to suppose these queens may have received enough of contagion from European foul brood so they might transmit it to their offspring or at least transmit the resisting properties through their mate?

Mr. Kindig—I will only take a half a minute. I contend that if a queen had foul brood in her infancy she would not amount to anything.

Mr. Wheeler—It seems to me the history of the animal life, is proof, in looking it over, that any species of animal life will free itself of disease in just this manner that Mr. Cavanagh speaks of—will tend to develop a constitution that will throw off the disease.

Some one said here today they found when they took the queen away and allowed the same brood to rear a queen of their own, the disease disappeared. We know with other species of animal or insect life, diseases are thrown off in the same way.

Mr. Pyles—It appears to me, and I believe this will be borne out also, that in the throwing off of diseases in raising or breeding of that kind of stock, whether it be human or what not, to throw off this disease it takes a great many generations to do it. Smallpox is not as bad as it was forty or fifty years ago. Nearly every man and woman in the country has been vaccinated. When we find a case of smallpox here and there it is not spread over the country like wild fire, like it did in the days of the civil war or before—

And if you take away all those safeguards, of vaccination, and start down in the city of Chicago in the north end and everybody has smallpox, before it gets to the south end it would be a different disease.

Also the case would be the same perhaps to some extent in European foul brood.

We know if a queen is reared in the same hive or if she be a young queen introduced with sufficient time for this old brood to become offensive, we don't have the disease appear, and it don't have to be Italian, but we think the Italian is the best bee on earth. That may be, to some extent, more or less, immune, and some queens are immune, yet I do know and I believe everybody who has been out inspecting bees in European foul brood sections will bear me out, they do find Italian bees as badly diseased as black bees. I am sure I will be borne out in this, that the European foul brood sections, in the case of Italian bees are as badly affected affected with the disease as black bees. I don't know that this would be so in all cases. In the sections where I have been and found European foul brood I have found this true, and among just as well bred bees as I could find anywhere, but in nearly every case where the colony is strong enough and a sufficient length of time is given them the disease can be overcome.

This cannot be done where the colonies are too weak or run down.

It seems that Mr. Cavanagh must naturally mix, and he is also mixing with other people.

Mr. Wheeler—I believe the brother over there took a strong example in using the case of smallpox.

I believe there is no doubt among doctors that the human family throws off tuberculosis with the right kind of care, and if they overcome it will gradually become immune to it, and the same with other diseases. We will gradually develop an enemy to the germ that is causing death, and I think it is the same with the bee.

Question—What advantage in wintering in cellar over using double wall hives, if any?

Pres. Kannenberg—Has any one used double wall hives in wintering?

Has anybody used double wall hives in wintering?

Mr. Bull—"The advantage"—What does that mean? In getting honey, or how? There are several things to take into consideration. The first thing is the cost. They cost more to start with. Another thing—Whether you want to migrate? You can't migrate with double wall hive. I can put them in the cellar quicker than I can pack. After you get them there it doesn't

take near as much to winter them; you can get through on less honey. In case of a bad winter, like two years ago, I prefer to have mine in the cellar.

Pres. Kannenberg—If you have chaff hives you don't need to pack them.

Mr. Bull—If you have chaff hives, you can't move them unless you get a derrick.

My single wall hives average one hundred pounds a piece.

Mr. E. S. Miller—I am not a member, but for a number of years I have experimented both with outdoor wintering and cellar wintering, and I have come to the conclusion that cellar wintering is very much the better provided the cellar is properly constructed and ventilated, and that is where a great many people fall down, in not having proper ventilation in the cellar.

As Mr. Bull has said, it is much cheaper and less labor to put the bees in the cellar than to carry heavy hives. Depreciation on the cost of the cellar if it is made properly of cement, would be very little, while depreciation on the chaff hives and double wall hives would be considerable.

The action of the sun and rain on these out of door hives would cause them to crack and fall to pieces in a few years.

Perhaps it might be well for me to state how I would ventilate a cellar.

I have three cellars at the present time. The best one is constructed of solid cement; one is brick; another cement block; these have a tendency to crack on account of the action of the frost. When constructed of solid concrete it is there to stay.

The chimney extends from the bottom of the cellar up to the honey house above, a height of twenty feet, opening for passage of air used in cellar is next to the floor.

There is 8-inch tile extending out about 75 feet and entering at the bottom of the cellar. In the winter time when the bees are down there, by a lighted match, the candle is held at the entrance it is found there is draft enough almost to extinguish a flame at any time. That shows that the pure air passing in and out is a fact.

I built one cellar a number of years ago before I understood the principles of ventilation, in which I made vertical ventilators on the outside, to go down and enter the bottom of the cellar and by holding a lighted match no movement of air could be detected, because the wind pressure is one of the forces that carries the air in. Other forces are difference in temperature within and without the cellar. Warm air is lighter than cold air and will rise in the chimney.

I made experiments and tested the temperature at different times when the air outside was cold and warm, and I found the movement of air was present at all times.

The movement of air at the entrance was always present whenever the wind was in motion outside, from the west, north and south.

I will say that my average loss for the last five years was less than one per cent.

Pres. Kannenberg—Any one ever used the chaff hive?

A member—I am using the double wall hive; that is not a chaff hive, wall all around but has 2 1-2 inches to 4 inches packing.

I find in my experience, the bees wintering out of doors are a little bit more ambitious in the spring; they are a little stronger and can stand the cold better. I have wintered of course at some loss just as well as in the cellar. I have wintered in the cellar, too, and have lost considerable.

You can't always control the cellar; sometimes the temperature gets a little too high or too low, where with out of doors wintering the weather conditions do not make any difference. If it is a little warm, the bees will come out, to some extent. But a few will come out and those that come are just as well dead because they do not amount to much anyway.

So far as consuming honey goes, I have seen very little difference. It may take a pound more; that would be about all.

Mr. Knezer—We have the double wall hive and with the exception of two years ago we never lost more than four or five per cent. In five or six years, but we lost quite a number two years ago with the cold weather; fall feed was not very good then and we had short stores.

Mr. Miller—One of the reasons why I prefer the cellar is because they do not need watching. The temperature is nearly the same all the time.

I don't take off the bottom board; there is a 7-8th inch opening; the

bees are carried out and dropped on the cellar floor but not very many of them do that.

Mr. Dadant—As I understand it, Mr. Miller built his cellars for the purpose of wintering bees.

Mr. Bodenschatz—I was speaking of an ordinary house cellar. I have wintered in quite a few different places. I have at present over 300 double wall hives. I only use 3-8th inch entrance.

Mr. Cavanagh—May I not be allowed to ask a question, as to whether the air enters from the bottom of the cellar?

Mr. Miller—If the air comes in at the top, if the weather is cold outside, this air will be heavier and will drop to the bottom, but if it gets warm outside the air coming in will be warmer than the cellar air and will not drop to the bottom, and there is no ventilation where you need it the most.

Question—Is it necessary for queen breeders to introduce new blood?

Mr. Duby—Of course I will say, Yes.

Mr. Simmons—Do you sell queens?

Mr. Duby—No, I don't.

Mr. Pyles—Mr. President, I could tell if I wished to, who wrote the question—and I didn't; but there was a gentleman at noon asked me if that question was going to be put up, and I said, "not unless you bring it up."

That man is in the queen rearing business, although he says he is not. He is selling queens and he would like the other fellow to mix up his blood a little and consequently in mixing it up he might get a queen from him. The average queen breeder—the majority of them—are talking about getting in new blood.

We must all take our hats off to Dr. Miller—when it comes to producing a crop of honey, although his conditions are no better than anybody else's, he seems to get the honey, whether better or not. He started with any kind of bees and bred from the best he had, and there were some pretty hard looking bees. When we went there he said—"Put on your veils; you can't go out in my yard without veils on."

He has built up a strain of bees by simply making a selection of the class of bees that do the work. They are mixed up but the one selection of his own strain. His own selection is what is producing the honey, undoubtedly with his manipulation.

I have been claiming for a long time that man with good full Italian bees does not need, if they are good, to introduce Italian blood from any body else's apiary. If a man is not selecting his queens properly, he had better commence pretty soon to do this. The one to rear your queens from is the one that is producing the greatest crops of honey. If a man is sending to this and that man for queens he will not get anywhere; he might as well quit.

I would not buy a queen from a man whom I knew was buying queens from all over the country and rearing queens.

It is possible to test out queens side by side, but the only way would be to do that by the introduction of new blood; rear queens until you have tested and ascertained whether her offspring was better than that you have in your own yard.

When you rear drones promiscuously, you are going to have your blood mixed up, but if it is along your own strain of bees you can't make a sad mistake.

Mr. Duby—I have known Mr. Pyles a good many years and that is the first time he pressed the wrong button, because I never wrote that question.

Another thing, you might not call me a queen raiser in the true sense of the word because we don't sell many queens. I always like to poke the fellow in the rib when I know he is a little ticklish. He is on the wrong track.

I cannot agree with this man in question at all. How does it happen that today we have better bees than we ever had? How is it that some people are more progressive than others? Mr. Pyles seems inclined to be foggish.

Some years ago some of those old bee-keepers would gett a crop of 25 or 30 lbs. of honey from a colony and they thought that was good. They did not care if some one else was progressive. They didn't care if some one else had better hives and got more than double the crop.

How were more pounds of honey per colony gotten? By having better bees. We have got to find this out by comparison, and how are we going to make the comparison unless we get queens from some one different from those we already have.

My idea is this: Not because I have

queens to sell or want to patronize any queen breeders. The idea is to compare, and the only way you can compare is to get a strain of bees from another breeder; infuse new blood; put them side by side and compare results. If you get better results from the bees you get, go ahead and then cross one way or the other; I don't care if they are red, black or white.

The contention was here today that the pure Italian would give the better results. You don't find Italian bees very cross. They are the most gentle, yet Dr. Miller's are cross. How did he get them? Simply by crossing; that is the only way, and to cross, we have got to get new blood.

Pres. Kannenberg—Mr. Stanley, I believe, is a queen breeder. What does he think of it?

Mr. Stanley—I have been satisfied with hearing others say what they think and what they have to say.

If you want to know anything I have tried out I might tell you something.

Mr. Dadant—We would like to hear it.

Mr. Cavanagh—I believe the Convention wants to hear from a man who has tried things out. We don't care about theory unless there is something to the theory. I would like to hear from Mr. Stanley if he feels that he would like to talk to us.

I am depending on the other fellow and I will try it out after he gets it perfected. I would like to hear how he accomplishes results.

Mr. Stanley—As far as buying from other dealers, I believe in that. We have got to know what we have got and we can't tell until we buy from other dealers.

I have imported queens as high as $10.00 a piece and compared them. They would not breed the first year, and I then discarded them, finding them no better than mine; and I have found others bought of other dealers very good.

I have raised a number and crossed. I have good bees and gentle bees to handle. They are not like Dr. Miller's. I don't have to take a half hour to put leggins on and the like, although Dr. Miller does get the honey.

Mr. Smith—I believe the laws of heredity are being pretty well understood by a great many of our scientific men. We know enough about it to know how to produce white chickens from blue ones. We know enough about it to produce blue chickens from two other colors, and the same law certainly holds good all through nature.

We know that no man who is color blind ever had boys who are color blind unless there is color blindness on the other side of the house.

If those things are true, and we know they are, and we have been studying them for a hundred years or more—we know the same method of selection will produce a better bee; yet we are not in a position yet to know how to thoroughly control the production of that bee because we cannot control the mating of the bees.

I don't believe we ought to get bees from any man just for the sake of comparison. We can compare bees anywhere. We should get bees from the same strain. When we get bees from some other man and get better than we have—when we learn to take the microscope and examine our bees and know their different points of excellence, like we can know of our hogs and cattle, we will begin to get results.

Dr. Miller certainly is on the right track.

I believe that you could breed a line of bees that would hardly collect any honey at all. You would have to feed them in order to keep the strain in existence. Just like we have certain beef cattle that we have to raise other cattle to bring up the calf if we get the best strain and the best cattle.

I believe we can breed them for color. I believe we can breed them for longevity. I believe we can breed them for these different characteristics.

What we want in queen breeders are men who know what they are breeding, and men who will sell us that bee, and I believe if we get to the point where we are willing to pay $10.00 or $15.00 apiece for queens we will begin to get a better strain.

Because you have a hive that produces more honey than any other hive in the yard, and they produce it because they are a cross between two pure strains is pretty good evidence the queens raised from that hive will not produce as good a strain of bees. You have gone your limit when you cross them.

Now by taking books that are printed by men who have made a life study

of this question, our queen breeders can learn a great deal in improving our strains.

I have spent considerable time in trying to figure out a plan whereby we can control the strain, but the price that is being paid for queens will not justify a man taking the time and trouble to prove it.

Mr. Cavanagh—We are getting down to something scientific. The trouble is the bee-keepers go at it haphazard and draw hasty conclusions perhaps, because we do not understand about these things. When we buy a breeder, we should test her as a breeder and test the bees from her offspring, and not the breeder herself entirely. If we buy a queen and try her out for her working qualities alone we may fall short, while if we try her offspring, we may find them good.

Mr. Wheeler—Mr. Smith, this morning, wanted to know if we were going to bring up the question about the agricultural reports this afternoon that was brought before the convention this morning, and stated that he had something to say on that subject.

Would it not be a good plan to bring it up at this time? That was the understanding, was it not?

Pres. Kannenberg—Yes.

Mr. Pyles—One thing further that I wish to say on this line of breeding:

The man who undertakes to introduce this different strain of chickens, starts out with peculiar characteristics nearest to the type that they have in view when they started out to breed this strain of chickens, and they breed only with those that come nearest to that type, and they keep at it.

Those people inbreed very closely along this same line until the type is thoroughly established, and when ever three generations of poultry, as the case may be, are all marked alike, they say the type is established; and if three generations of our bees would have this same type, the strain is established.

Your remember—the Jew is perhaps the closest inbred of all the human family.

Abraham married his half sister; his son married his cousin, and the Jew has been built upon this type.

How many ever saw a Jew in the poor house?

When there is a big lot of money at stake—when it requires all the intelligence he has, he can go longer without anything to eat, and his endurance is without end at that time. The Jew has been noted for a man of great physical power.

When we begin to cross the human family, back and forth, and produce freaks of nature, they may run weak or strong.

If you want men of wonderful strength and wonderful endurance don't cross—and the same thing will be true in bee-keeping.

First, it must be a very close relation and type, with the idea in view all the time of producing this one thing you started out to do, for honey gathering, for color, or whatever the case may be; the average bee-keeper is in business, however, for the amount of honey he can produce. In order to keep this type fixed and the strain pure you must have three banded Italians in order to have pure blooded Italians.

Mr. Wheeler—Natural selection goes a long way in doing the whole thing. Bees that have the most vitality are the strongest; those that are weaker will not increase and finally die. Nature seems to be working along that line with the bees.

Mr. Miller—I would like to emphasize one statement of the gentleman about reading bee books on heredity. I think it will pay every bee-keeper to do this, especially the queen breeder.

Question—Has any one tried the A. C. Miller smoke method of introducing queens—and what success?

Mr. Dadant—That method of introducing queens has been talked of a great deal in the Bee Journals, and we have tried it ourselves with rather indifferent success. Gleanings gave it such a big boost—I suppose probably we didn't use exactly the right method.

If there is any one who has used it with success, we would like to hear from them.

Mr. J. M. Gingerich—I have had some experience.

Mr. Wheeler—What system was that?

Mr. Dadant—The A. C. Miller smoke method of introducing queens.

Mr. Cavanagh—Might it not be in order, for the benefit of the convention, to outline the Miller smoke method of introducing queens. May be some

here would not recognize it by the name and yet have used it.

Mr. Dadant—I don't know that I can outline it exactly. Have you tried it?

Mr. Cavanagh—I was in hopes you would not ask me.

Mr. Dadant—Mr. France, do you know the exact procedure?

Mr. France—The principle involved by the introduction of queens by the smoke method, is that smoke bewilders the swarm, and while in that bewildered, partially drunken state, the introducing of the queen followed by another little puff of smoke—by the time they have started up they have accepted the queen.

A few years ago when Mr. Hutchinson was selling queens, he was guaranteeing the safe introduction of those queens if he would introduce them through the smoke method. They were carrying this to the extreme by using tobacco smoke.

I have tried both with and without and I could see little difference. It is the quieting of the bees, or subduing them during the time of introducing the queen, and by the time they have sobered up they have accepted her.

Mr. Duby—We have tried all known methods of introducing queens. We have tried this over and over again and more than once we failed. We have tried it with one queen and failed, and tried it over and over again with another queen and failed again; smoked them more and more, and still they would kill the queen—and with other colonies we had no trouble at all.

I have tried, for the sake of experiment, just letting the queen walk in, while other bees with any amount of smoke would not accept queens.

Mr. Pyles—It seems to me that we ought to have a recess—I move that we have a recess for five or ten minutes.

Motion seconded and carried.

Meeting convened.

Pres. Kannenberg—We will take the matter up that we laid on the table this forenoon. Our Secretary will read the points.

Mr. Dadant—The questions submitted, most of you have heard. President Burton N. Gates, President The National Bee-Keepers' Association has asked us to bring this before the Chicago Convention. The Bureau of Statistics desires information as to honey crop reports, and this was taken up this morning and discussed and laid over on the table for this afternoon. The President puts the matter before you on the request of some of the members.

Pres. Kannenberg—I would like to hear from any one who has anything to say on this question.

Mr. Smith—Mr. Chairman, it seems to me this is one of the most important things that has ever come before the Bee-Keepers' Convention during the time I have been attending.

The principal reason why honey is not used to a much greater extent than it is now used is lack of advertising, and I think I can see where we are going to get some fifty or one hundred thousand dollars worth of free advertising out of this, and possibly more, in the United States.

I believe that our newspapers will report the results of the government's investigation, and honey will be brought before all of the people to a much greater extent than it is now, and when we can get the people to understand they are going to get honey instead of some manufactured product, because thousands of well informed people still believe that honey is manufactured, comb and all, and adulterated,—if we can get that before the people there will be a great deal more honey used.

I was amused considerably because one bee-keeper seemed to be opposed to this proposition because he thought it would raise the rent on one or two or his out apiaries.

Why does he not, if his business is so profitable, buy a half an acre of ground—some of the swamps or something of the kind—bees would go a mile or two or three miles to get that honey.

I believe bee-keeping is profitable enough so that a man can afford to buy an acre or ten acres of ground and put it to fruit and bees; you get more fruit and his bees will pay all the expense and he will make a profit besides if he handles the bees intelligently.

But we are not handling them intelligently when we are opposing movements that are of general wide scope, we might say.

We ought to have for the benefit of the man who sells the honey (and if we benefit him we benefit the man

who gathers it)—He ought to know in advance what kind of a crop there is, so that he can make his arrangements as to how much he can handle.

We ought to know the condition all over the country as to the honey crop, so as to know where to send the honey in large amounts to sell. It seems to me that we ought to know the number of colonies that produce the crop, and the amount that is produced, and if the Department of Agriculture starts out to get this information, they will probably get reliable information.

And it is for us to take advantage of that information and use it to our benefit.

Pres. Kannenberg—Mr. France, can you give us something on that subject?

Mr. Dadant—Mr. France has had considerable experience in receiving reports—he probably got a lot of them this year when he sent out the honey leaflets—probably got almost as many as the government would get from as many different parts of the United States.

Mr. France, do you consider that pretty authentic upon which to base your estimate of what the honey crop was over the different states, and the amount of honey, or do you think the Government could carry on that kind of an inquiry and get us something that is really authentic and worth while?

Mr. France—So many of our bee-keepers, that you call farmer bee-keepers, who live upon the farm and keep bees, take reports of this kind at a wrong meaning.

While Manager of the National for several years, I asked for the crop report; had it published and sent it to the members, and you knew the number of colonies—the pounds of honey, comb and extracted, and many of the members told me they could make a comparison and see what others were doing and were glad to get them.

When it was a favorable year we could depend upon the reports being authentic, but when it was a poor year I would get nothing. They only want to report when they have something to brag about, and we need reports on the bad years more than we do the good ones.

The man who is a dealer, a jobber, and the producer if you please, should know the bad year just as well as the good one.

In getting out this Booklet I asked that the producer give me the number of colonies of bees, pounds of comb and extracted honey and the price he was getting for it. I had perhaps a double purpose in view.

One who had but a few colonies of bees might ask for a good many of those honey booklets, and in my judgment he might be over-reaching some one else who had an extensive production, having a wide distribution of his honey, yet would be modest and would say—"Send me fifty copies." It would hardly be fair to send one man who had only five or six colonies a great number of these books, and the man who had several hundred colonies only fifty copies—

But when it comes to the question at issue—would the Government get these statistics? I call to mind an experiment in my own state.

Our Bureau of Entomology has tried hard, and I have tried to help them, to get a statistical report of the state, and they have sent out thousands of letters to the bee-keepers of our own state, with a crop report blank to be filled out and returned and I am ashamed to own up to it, that the number that have been returned have hardly paid for the effort. They lack somehow the interest.

This information would go back to them as a help, but I know how indifferent they are, for my son at the University has charge of that work.

At the same time, I as Inspector, would send out circular matter asking "the number of colonies of bees you have got", and 99 per cent of them would answer.

Now the question as it appeals to me, is, will the bee-keepers respond to the good that the Bureau would do them in this effort? If they will, there is some good in it.

True, the commission man and the dealer are as anxious as anybody to know what the crop report is; on the other hand the producer wants to know just as well.

As an illustration, in that crop report that was returned for these little honey leaflets, I learned that some were selling their honey for 8 cts. a pound and thought they were doing well.

I sent them a few books, and advised

them to change the price as they were way below the average.

A crop report would be of untold advantage to these men, and I would like to see it a success, but I don't know how we could advise at the present time.

Mr. Duby—Looking at it from this point of view, I think it would be a hard proposition to get anything satisfactory out of this.

Look at the grain report; it is not the farmer who makes the report; it is the elevator man from town to town, from place to place; they send the report to certain headquarters, and that is sent to the government. It is not the farmers.

If any one in the state was appointed to do the work and would send to the farmer, the chances are that not one of them would comply. They don't want to let it be known what the report is.

The elevator men can get accurate reports.

I have an idea the bee-keepers will not pay any attention as a rule to the questions asked regarding the making of a report.

I know some men who would positively not make a report of any kind, no matter how much good it would do him or any one else. He is anxious to know what the other man has got, and the price, but he don't want to tell what a big crop he has, or where he sells his honey, or what he gets for it.

If his honey was going on the market the same way that a farmer markets his grain, that would be another proposition; then we could get the report.

The way it is going to be done, I don't believe we could get any satisfaction out of it—nevertheless, it might be good, but to get a really satisfactory report, I don't believe we shall ever get it.

Mr. Pyles—I hesitate to talk upon this question. I have talked about it at Springfield and at St. Anne, and some this forenoon, and I am of the opinion, as I was then, that it will not be possible to obtain correct reports.

If the gentleman who spoke about buying acres of ground on which to keep bees, will tell me where he lives, I would like it.

Mr. Smith—Chicago.

Mr. Pyles—I presume you would be able to buy a half acre or acre of ground.

If the gentleman will come down to my section of the country, within any reasonable distance of where I would need to acquire the land, and purchase the land for anything like several times the price it is worth, I would be willing to buy it, and then publish my crop report.

I don't believe it is possible for the average crop reporter (there are other men besides elevator men gathering statistics for the government—some are grain growers) to get a correct report.

No man is going to give you an accurate account of the condition of his bees or the prospects of the honey crop except the man who is a bee-keeper. The average crop reporter knows nothing about that.

I was in Peru Junction. It is excessively "wet" for the size of the town. I met a man I knew; he was staggering down the streets, and he said to me—"How is the bee business". I replied—"Nothing doing now." He said—"Well there ought to be; there have been lots of flowers" and the ground was frozen then. He had the idea there ought to have been lots of honey because there had been lots of flowers.

Now what does a man like that know about the honey business? The average man does not who does not keep bees, and when the average crop reporter goes out and asks bee-keepers as to the crop report, etc., he will not find very much about it.

As a rule bee people want to know something about the crop and they find out something about it, and there are not many men that are in the honey business, that sell it for a living, but are posted. When men buy honey of the producer in large quantities, they do not buy it much below the price they can buy it of the commission men in town.

I will guarantee if they come down and ask me for a ton of extracted honey, they will pay me or I will ask them anyhow what the honey is worth.

Mr. Bodenschatz—In regard to the Honey Crop Report: It is rather hard to get a right report. I have gotten reports from the National many years back.

What kind of a report can we give them? We don't know what the future report will be; we have got to

wait until almost September before we can tell what he have.

Take for instance this summer: In July our crop was cut short by a drouth. We extracted what was sealed, and in a week we got a big run, and two weeks later we got a big crop, mostly from ripe sweet clover; that lasted for about two weeks and a drouth came and we got no more for three weeks; we got some rain and a heavy fall flow.

If I gave my report in July, I would not have been able to have made a correct report. In the month of July I had about 500 gallons off, whereas by the end of the season I had over 1,800 off. It is a hard thing to get a right report unless we wait until September.

Mr. Cavanagh—I don't think there is any question but what we would all be interested in looking over a report of the bee-keeping business, showing how many pounds of honey certain bee-keeprs received per colony and in the aggregate, and how much it was sold for, but I, for one, will frankly say, I shall not give it. If my bank wants a financial statement of my business for the purpose of loaning me money, I will give it to them. If my lawyer wants a statement, for the purpose of determining something that interests me, I will give it to him. If my wife wants it, I will give it to her—but I don't care to publish the amount of honey I have and what I sell it for—and I think there will be a great many other bee-keepers that will feel the same way about it.

The best I see that we can do is to report the probable conditions the fore part of the season, which can be done with reasonable certainty.

There are certain rules that have been worked out by men who are more or less scientific that may forecast in a general way what the coming season will be, but as has been stated, it is very uncertain.

We hear of lots of rain in California in the winter and for that reason we suppose they will have a good honey crop, but we may be surprised to find a total failure in the east that we didn't look for.

I think bee-keepers are perhaps selfishly keeping still about conditions and listening to what the other fellow has to say.

I do not believe we will be able to get a report from the main producers themselves. There may be some who are not in the business very heavily who will give out reports, but I am afraid a whole lot that make bee-keeping a business will not do it.

About the only principal advantage I can see will be to the producer that has honey and sells it at eight cents a pound—and to the dealer who buys honey—but not to the producer who is trying to sell to that dealer at a good price.

For instance—we have a firm in Ohio—a certain large bee supply firm who sold to us at a certain good figure at one time. They answered an "ad" of mine and I sold to them at a good figure. Then the Michigan bee-keepers put out a booklet advertising the name of all people who had honey to sell and the price at which they were holding their honey. The result was this firm laughed at me, you might say, when I asked them 15 cents a section for comb honey, and said they could buy plenty of it for a shilling, and some for less.

Where was the benefit derived from that report, going into the hands of these dealers?

If we can take some movement to put a little gray matter into the heads of some of these fellows who are offering honey at 8 cents and get them to raise the price of the product, it will be a great uplift to the bee-keeping fraternity—but whether a Crop Report gotten from probably these fellows, can be secured that will be a benefit, I doubt.

We may be able to get a report from dealers and commission merchants which won't be shaded to the interest of the dealer.

Men controlling large Bee Supply Houses may give us this information—but I doubt if we can ever get it from the producers direct, that is, a report of the number of pounds they produce and the price they are asking for it, unless they want to advertise the crop; there are a great many who don't care.

Mr. Smith—I think that the most of our disagreement comes from the different way in which we understand the question.

I do not understand that this is sent out to us for the purpose of our showing them they can't do what they started out to do. It reminds me of one of our generals during the Civil War. He went to Washington, and

in to see the President, and spent half an hour telling the President why he did not take Fort Fisher, and explained to him that it was a physical impossibility to take Fort Fisher.

He came out from his interview, and up came a little colored fellow calling out—"All about Fort Fisher done captured."

While he was explaining why it could not be done, it was already done. We don't want to go to Mr. Cavanagh's apiary and count his bees, nor do we want to know exactly the number of pounds of honey that he may have, but without having been near Mr. Cavanagh's apiary, I know that he is producing honey on a much greater scale than the average bee-keeper.

I saw brother Cavanagh's agents a year ago in Elgin, forty miles west of here, canvassing Elgin to sell his honey—he lives in Indiana sixty or seventy miles from here.

I know from that that brother Cavanagh found out in some way what the demand for honey was in Elgin. I know that he needed information about the honey situation in Elgin. The Elgin man needed information as to where he could get honey the cheapest.

There are hundreds of families who do not taste honey from one year's end to another, and perhaps not once in five years, because they do not know where they can get it at a price that they can afford to pay.

These statistics that are to be gathered by the government are to report as I understand, on the general honey crop, not on just a few pounds one way and another—not on what any particular honey producer produces.

We ought to know about the total number of bees in the United States. We ought to work for the benefit of humanity to a certain extent. We ought to increase our market.

A year ago there were some men producing onions in Texas. They came to Chicago to see how many carloads of onions they could sell. They were offered seven or eight cents a pound for a certain number of onions.

The agent said—"I am not here to sell onions at seven cents a pound; I am here to sell them at 3 cents a pound.

If we can create a demand for onions, all that we can raise, at three cents a pound, we can make enough money. We won't sell the onions unless you will agree to retail them at 3 cents a pound. Unless you sell our onions at 30 cents for ten pounds we are going to organize the women of this country to sell them for less than that." He sold sixteen carloads in one or two days. That was better than selling a few pounds at 50 cents a pound.

One of the great questions today is for humanity to get as much good food as it ought to have. Hundreds of thousands of people are suffering because they have not the proper food.

The way we should look at this question is the broad way—

Increase our markets until we can get a price that will justify our gathering perhaps thousands of tons every year.

Think of the people starving for something to eat when there are thousands and thousands of tons of honey going to waste, with no bees to gather it.

I want to suggest:

If you will go to the people who have orchards and present the subject rightly to them, you can get all the land you want for your out-apiaries, and it won't cost you anything. You can reduce your rents.

I want to say to the brother, the one to whom I said I was amused—he is narrow—he narrowed the thing down to himself. He thought that farmer was going to raise the price of the rent. He should figure out exactly what he can afford to pay and pay the farmer what it is worth. Co-operate with him, and I know there is money enough in bee-keeping so that he can afford to buy land and pay a good round price for it to get an apiary in the right location.

Go to the man and show him just how much space that hive is going to occupy—how much it is going to benefit his orchard to have it there, and perhaps he can create a demand for apiaries.

Just last year some man went into Massachusetts and created a demand for hundreds of colonies of bees by showing the men who raised cranberries that by having apiaries they could increase their crop, by using the bees to fertilize the flower—and I understand there are a number of cranberry farmers who have apiaries just to increase the cranberry crop.

Don't expect too big a profit from

your honey. I think it was Alexander that said that honey could be produced at two cents a pound; that may be true and it may not be true, but if it is true let us work along the lines of producing our honey for less money and selling more of it, and accomplish something for humanity.

Mr. Cavanagh—I think the gentleman has done a worthy piece of work when he got me on the track, but he seems to have gotten off, too. The question we have under consideration is: The establishment of reliable statistics on the crop of honey, the forecast of it, and what the crop actually produced afterward. I intended, although I guess I failed—to bring in a little stronger the idea of working more through the commission men and dealers through the country in order to get them to co-operate in this. Where I look for my most reliable information as to the honey crop, is in Gleanings—where they say it is coming in plentifully or that it is scarce. If it is possible to secure these reports from bee-keepers, no doubt it will be a help. I don't want to be selfish in the matter.

It is not a matter as to whether it is going to influence our pocket books, but it is what is best for the general good.

There may be some questions in our minds that we will thrash out as to what constitutes the cost of producing honey, and what constitutes a fair profit. What we are discussing now—Is how to accomplish the desired end.

Mr. Dadant—We have had a good lively discussion on this subject. Don't you think it would be in order for the committee to draw up a set of resolutions on this for the convention to pass on, and we can have a vote on the various questions, yes or no, and down it or vote it through as we see fit. I move that such a committee be appointed, and report this evening, so that we can have a discussion this evening.

Motion seconded and carried.

Mr. Dadant—Mr. France will have to leave in a short time; may we have a word from him?

Mr. France—A few years ago while Manager of the National Association there was an organization among the producers—some were dealers—and some were commission men—with the idea in mind of creating a fund to advertise honey—a great demand for honey—a great consumption of money—that was the object of it. Well, in a short time—that fund reached a little over $1,500. Now, the question was, how are we going to use it? It was finally turned over to a committee of the National Association to be used as in their judgment it was best to do, to create a demand for honey, and being the first appointed on that committee, I was surprised soon thereafter to get orders to use what was necessary to go to Chicago at the first World's Pure Food Show and bear what expense was necessary to create a demand for honey.

I could not see where it was going to help create a demand for the public at large. It was a big undertaking and if it had not been for the generosity of good hearted bee-keepers to see me through with it, it would have been still worse. The cost of that, all told was a little over $800.00. About $400.00 was paid for floor space to begin with. Then I had to accumulate honey from various parts of the country, and if it had not been for Mr. Wheeler coming to my assistance, perhaps more than any one individual, we would have fallen short on it.

We won all that we had a promise of—a diploma, and I can't see where it has created any demand for honey. It cost all told a little over $800.00, leaving $600.00 of that fund to be used to advertise honey.

Finally, I have decided that the way to advertise honey is to sell it at your door. First produce goods that you are proud of That some are not doing. Unripe honey should never be put on the market, and I wish there were some way or source by which we could curtail these poor grades and place them where they belong.

But granting we are all going to produce a good quality, gilt edge honey, the next thing is to sell it. We have learned how to produce it, the next thing is to sell.

Taking what little experience I have had of my own, I found I could not keep bees enough to supply the demand for the honey I was producing, and I had to buy—and there was where the shoe rubbed. I could not find honey to take its place. It was hard to find honey that I dared put out, and for that reason these little books were compiled by the Editor of Gleanings—

and I fully believe I mean all I said in that advertisement. With over one hundred uses for honey, if the producer will produce fancy goods, and will go at it as the commission man or any buiness man will do with his business, keeping track of those to whom you sell—have a follow-up system, you are bound to succeed.

You give one of these booklets to Mrs. "A" with a sale of honey, and ask her to try certain ones of those recipes that you know to be good, and you will be surprised how soon it will be that you will hear from her—"I want another can of honey."

Let it be at your home market, or your home market may be wherever you ship,—wherever it goes,—you will find this result.

Another thing—I purposely asked that that blank page be left blank, that you may take advantage of the same and put your advertisement on the back page.

When they use these recipes, they will inquire, "where can I get the honey?" On the back it will tell. They will soon want a can for their neighbor, and their neighbor's neighbor will want honey.

My 45,000 lbs. of honey are gone and I am on the market to buy, and this will be so with you if you are like me.

Just as sure as you undertake to pawn off a poor grade of goods for first grade, you fool your customer and cut down your honey market, and I believe I will be safe in saying, and one of our largest dealers in your city, who has made his appearance in the room, will bear me out in the statement; that what has hurt our markets more than anything else is UNRIPE HONEY.

The Colorado Honey Producers' Association have put their order in for this book, and they are going to order several thousand of these (booklets).

Here is the largest producer in the state of Minnesota—with his advertisement on the back. He had a 48,000 lb. crop, and now all gone. Last week he was trying to buy honey in Minneapolis to fill out his market.

I only regret this advertising fund has given out—we could use such a fund to good advantage at this time.

I was kept more than busy for some days, getting these books ready to send out, until I was compelled to make a halt and save 300 copies, to send to those who had not had any.

Now out of 45,000 of those books that have gone over the United States and Canada (sample copies), and to five foreign countries—if they are properly used I fully believe we will create a demand for honey and that you will be paid CASH for it at your door.

Coming back to the systematic following up of your customers—You can know that they have been making use of this book and that it has not been wasted.

What few copies there are here if any one here has not received a copy, you may do so at the recess hour.

Pres. Kannenberg—We have a committee to appoint to make a report this evening on furnishing statistics for the Government; I will appoint Messrs. Smith, Duby, Bodenschatz.

Mr. Duby—Mr. Chairman, it is possible I may have to go home on the early train; I will be back tomorrow, so I would like to be excused; I may be here and I may not.

Mr. Dadant—I would like to say to the Chairman of the Committee—the questions are here, and you may take them, to make your report.

Question—What is the best way to cure paralysis of bees?

Pres. Kannenberg—Does anybody know?

Mr. Bodenschatz—I had a colony, one that I kept for two years that had the disease. Then I re-queened and have not had any. I think re-queening would be as good as anything. I think only in certain colonies that would happen.

Mr. Dadant—Is it not practically the same thing as the Isle of Wight disease they had in England that caused such disturbance there; they had a great loss in England from that disease I know.

Question—Have drones a stinger the same as worker bees?

Mr. Pyles—I would suggest that the writer of this question—sometime when there are plenty of drones, would take the time to go out and investigate. That would give him about as much information as anything else. Try it on both of them and see if it is the same.

Question—What is the best way to imbed wires in foundation?

Mr. France—What experience I have had, I would say the electric heating

of the wires is the best; where you are not equipped for that, you will have to take such as we have of other wire imbedders.

Mr. Bull—How do you get wire into the center of the foundation after you heat it?

Mr. France—The weight of the foundation presses down and the wires is in the center of it; have supports high enough to clear the board.

Mr. Duby—How is a fellow going to get electricity when he is ten miles away.

Mr. Bull—Buy it by the box.

Pres. Kannenberg—The questions are exhausted so far. We will hear something from Mr. Woodman on his new section press and foundation fastener.

Mr. Dadant—Mr. Woodman has a new section press and foundation fastener which was shown at the Michigan Convention which is quite interesting. The machine speaks best for itself, and as it is almost time to adjourn, Mr. Woodman can tell us how this works and we can take a look at it.

Mr. A. G. Woodman—I have used a machine similar to this for twenty years but never put it on the market because it was not exactly in the shape we wanted it.

(Illustrating)—One advantage of this machine—You bring the foundation for putting in full sheets away from the machine by hanging on top. In every other machine that I know of, goes bottom side up and is liable not to be true.

Fold the section around the form on three sides only.

Swing the section up into form with the one side open or unfolded.

Pull the hot plate up into the slot in the form, then slide the large piece of foundation down and melt the edge; you then shove back the hot plate out of the way and slide the melted edge down onto the section. If not too much wax is melted it sets the minute it strikes the section.

Still holding the large piece of foundation in your hand as it sets on the section, you bring the hot plate back again, the hot sharp edge cutting through the foundation into the slot in the form, leaving the bottom starter one inch high.

Now close the fourth side of the section fastening the dovetails with the hand lever.

After you have fastened the dovetails you swing the section out of the machine, so you can turn it half way round. Then swing it back up into the machine again, so as to set the large piece or top starter, the bottom starter is already in place.

You now take the large piece of foundation that you have just cut the bottom starter off from and proceed to set this as the top starter. The process is the same as in the third operation, draw the hot plate up into slot in the form, slide the foundation down and melt the edge, then shove the hot plate back out of the way and slide the foundation down onto the section, the melted edge sticking fast.

You now swing the section on the form out of the machine and the job is completed.

When you first start to operate the machine take it slow and deliberate, as speed will come with practice. An active person should fix at least 1,000 sections in 10 hours' time.

Mr. Pyles—At what price would those sell at if put on the market?

Mr. Woodman—About $2.50.

Mr. Duby—In connection with this, may I ask a question? I notice the bottom starter here. Sometimes if a man is not careful he will put the bottom starter too high.

I was asking my friend here if this bottom starter was not a little too high? If the bottom starter is a little too high it will double one way or the other. Anybody having any experience can possibly enlighten me on this.

Mr. Bodenschatz—I have used bottom starter a little high but never had one double over; use thin foundation for bottom, extra thin for on top. I have a long piece extending almost to the bottom about 8 inches or so, so that it won't come together.

Mr. Dadant—I will ask Mr. Woodman—if that bottom starter is cut off by the machine itself, it could probably be adjusted to cut off any height you wanted?

Mr. Duby—The reason I asked this question is whether it was thought that this was a little too high or about right.

Mr. Woodman—I think you will find that governed a great deal by the amount of wax; plenty of wax there

will make it firm and it will stand up better.

Pres. Kannenberg—I think that will be about all. Some one might make a motion that we adjourn until 7:30 this evening.

Mr. Smith—Before we adjourn—I would like to have any of the members notify the Resolution Committee of any resolution they would like to put through, and we will give it our careful and best consideration. In that way we can arrive at a set of resolutions that will please this body; this committee is not going to try to force its own ideas on this body; we want the consensus of opinion of this body, and if you will come to us with your resolution, we will give it faithful consideration.

Pres. Kannenberg—If the committee waits for some one else to write the resolutions that are to be presented, I am sure we will not have any resolutions presented.

I believe it is the intention of the motion to have the committee draw up the resolutions. If they wish they can confer with the different members having different views on the subject, and if they care to prepare two sets of resolutions, either one of which can be accepted, or part, or both, very well.

Mr. Smith—It was the intention of the Resolution Committee to prepare resolutions, but we will save time in discussion if we get some idea of what you want.

Pres. Kannenberg—What is the sense of this meeting? Will we leave it to the Resolution Committee to prepare the resolutions?

I think that is the best way; we will leave it with the committee.

Mr. Smith—I move we adjourn until 7:30 p. m.

Motion seconded and carried.

Meeting adjourned until 7:30.

Meeting called to order at 8 p. m., December 17, 1913, by the President.

Pres. Kannenberg—We have a resolution here; our Secretary will read it.

Mr. Dadant—The Chairman of the Committee is present, but I will read these resolutions, shall I?

Mr. Smith—We offer the resolutions for the Secretary to read.

Mr. Dadant—

Whereas, the President of the National Bee-Keepers' Association has submitted a communication in regard to the government making a statistical report of the honey crop of the United States; therefore, be it

Resolved, That it is the sense of this convention that such report, if properly collected, will be of great value to the bee-keepers and the people at large—

1st. That such report shall be made by practical bee-keepers.

2d. It should be made to cover both comb and extracted honey.

3d. The estimate should be made at the close of the honey season.

4th. We favor the report of the honey crop prospect previous to the honey flow.

5th. That said report shall be made by Townships and States.

We make the following suggestion, that all Honey Crop Reporters be appointed upon the advice of the State Bee-Keepers' Association.

C. O. SMITH, Chairman.
H. S. DUBY.
ADAM BODENSCHATZ.

Mr. Smith—As Chairman of the committee, there is only one thing that I see now that probably you would like to have changed. We only considered Illinois when we were considering the community from which the report should be made—Township and State. Practical bee-keepers whom we consulted stated that there might be a township with a good many bees in it, and perhaps that would be the only township in the county in which there would be any. A report coming in from townships would be more valuable than coming in from counties, and would take much less work; that is why we reported in that way on that particular point, but now I see, of course this will all be revised by the National Bee-Keepers Association—but that will probably not be practical in other states.

Mr. Smith—I move the adoption of the resolution.

Motion seconded—carried.

Mr. Burnett—In seconding that resolution, I did not understand. A good many would like to have something to say on this resolution; some one might want to add or detract from it; I didn't want it adopted without discussion.

Pres. Kannenberg—Are there any remarks on this resolution?

Mr. Burnett—Since I have taken the floor, I will take the liberty of saying I think the report is quite in point, and the idea of getting it by townships, ignoring the counties, will probably serve the purpose if it is reported to some central one of the state. Probably the Secretary of the state would be the idea of the committee, and the Secretary of the state would report to the National body, the National body

issuing the report. I conceive that is the idea.

Mr. Smith—I think the idea was, reporters will report direct to the government. All the statistics will be gathered by the Agricultural Department, or they will appoint the men to gather these statistics, and I presume these men will report direct to the Secretary of Agriculture.

Mr. Burnett—I suppose that is a matter of detail we have nothing to do with anyway.

Pres. Kannenberg—Any further remarks? If not, they will be declared adopted, as above stated.

Mr. Pyles—I might call your attention, Mr. President, to one thing that the committee took bad advantage, of me, at least. It seemed to dawn upon them, and more forcibly than it did on me, until after I had started in I never noticed they were taking advantage of me; they got me to help write up those resolutions. I am not saying this to take away the honor due this committee because they told me what they wanted—

But after helping to write these resolutions, I could not fight them, of course.

Mr. Dadant—I would like to ask Mr. Miller if he has found a variation in temperature to have any effect on his bees in the cellars?

Mr. Miller—The temperature is very constant in these cellars. They are constructed for the bees with that in view.

I had one cellar in which the temperature ran too low because of the fact it was not made warm enough above. Between that and the honey room above it should be packed with saw dust.

The thermometer ran down in this cellar that was not so packed above. The cellar had pure air and it was dry, and the result was the loss, I think, of two colonies that winter. It would have been much better if the temperature had been higher; I prefer to have it 45 degrees or a little higher than that. It shows that with this result, even with a low temperature, if the bees have plenty of ventilation, plenty of pure air, and it is dry, they will come through, although in this case I found more dead bees on the floor than I desired.

Mr. Smith—I have a great many times heard, and have read a great many times the statement—"Give the bees plenty of pure air."—I would like to know how much that means. If we get enough pure air in the cellar in the winter time it will freeze—and if we don't get enough I understand the bees will die for want of it. Now how much is let into the cellar in twenty-four hours? What size pipe will convey it, or the number of cubic feet a certain number of colonies require?

Mr. Duby—I have had some experience in wintering in the cellar. We always put our weakest colonies in the cellar; not an especially made cellar; it is under the house where we can control the heat with the furnace. In having a furnace there we can get the air from the outside and yet control the temperature.

We usually put our bees in early in December, before the cold weather comes, and usually in February it has been our custom to take the bees out on the first warm day, sometimes the latter part of January, but usually in February; take them out about nine or ten o'clock in the morning, scatter them around in the yard, and by sunset, as soon as the bees are through flying, put them back in the cellar.

The point is to have plenty of ventilation in your cellar and control your temperature. When I left home it was 50; that is supposed to be a little high, but still the bees were resting easy.

As to the number of cubic feet required—that I do not know, but I notice when you step into the cellar you can breath easy. We need not worry but that the bees will stand it there all right, and especially when they are so quiet.

I have seen bees taken out of the cellar that have been on the stand two of three hours; they were actually dormant, and they would not go out until the heat had penetrated the hives so much until they felt they had to go out.

By controlling the temperature, giving them plenty of good fresh air, and good ventilation, I believe it is all right to winter inside. I have also found it would pay us when the colonies are very strong and have plenty of stores, to winter them outside with some sort of protection. Put several thicknesses of newspaper over the hives, and under roofing or winter cases.

I prefer to winter outside in our locality when the colonies are very

strong, and always have good results. The loss in the cellars does not average, I believe, one per cent, and considering the colonies were weak.

A member—How many do you put in that cellar?

Mr. Duby—35 or 40 or 50, never crowd it; and you can let in so much air at any time, day or night?

Mr. Cavanagh—What is the gentleman's locality, please.

Mr. Duby—The locality is about sixty miles south of here. Of course, sometimes the weather is very poor in Chicago and it is quite fair down our way.

Pres. Kannenberg—Has anyone else anything to say on this subject?

Mr. Wheeler—I want to say: that I differ from this gentleman in the fact that I winter my bees under the house and pay no attention to ventilation unless it becomes too warm. I aim to get the bees in a low and deep cellar as possible, and in that way they have a good temperature; as I understand a good temperature of the ground is about 45 degrees, and if the bees have no surface atmosphere to disturb them they will continue to winter in that 45 to 50 degrees.

I really think that they are less disturbed by not having the air stirring in the room. I have it perfectly quiet; I don't think there is any danger of the air becoming stagnant because there is a wall and the ground and the floor of the building to give ventilation enough, and take up any bad air that there may be. That is my idea. I have wintered bees for 35 or 40 years that way.

Mr. Miller—I think the gentleman is wrong in what he has stated in regard to ventilation from the very fact that bees become restless in the cellar; when the doors and windows are open and when they are given plenty of air, they become quiet in a short time. They do not need so much air when they are in this dormant condition as they otherwise would but they need some air.

In regard to the point raised by Mr. Duby in regard to keeping the temperature down, keeping them from getting too cold—m plan is to have the air come in through an underground pipe, say 75 or 100 feet, and by taking the temperature and reading the thermometer a number of times, find the temperature is modified very greatly in coming through that pipe, so when it is exceedingly cold outside it is very much warmer at the entrance of this air chute.

Now bees in the cellar, properly ventilated, remain quiet.

I have kept bees without very much ventilation and I lost a number of colonies that way: The hives became damp; the water came out at the front, and a mold would form on the hives.

The conditions in the same cellar were changed by putting in a ventilator; the hives were dry; the bees came through in better shape—so that ventilation is found to be a factor I believe in cellar wintering.

Mr. Wheeler—I prefer to have mould on the hives. I find the bees winter best where they are damp. The bees become more restless in a dry cellar on account of the desire for water.

There is a furnace in one corner of that basement, and they get restless in dry air and don't winter nearly as well as in the cellar underground entirely.

The bees will be perfectly dry and fine, and water will drop off from the hives when I carry them out. It is the moisture around them that seems to be a cloak, and they seem to go to that moisture and they get their drink.

I would rather not have them dry. In keeping other stock, people don't look at it in that way, and I don't either, but bees are different. I find when they are damp, and the temperature is right, I don't care a cent about the ventilation.

Mr. Duby—If Mr. Wheeler was down our way I believe he would try it but once. For my part, give me a dry cellar where you can control the temperature more or less.

They don't consume a pound of honey during the winter. My bees are dormant most of the time.

Mr. France—Mr. Chairman, I have not heard anybody from Wisconsin, so I will speak for a moment.

In my work over the state in the spring, inspecting bees, I have made a good deal of a study of this proposition of wintering. Where much of the cellar wall in our state is out of the ground they have trouble in wintering; the frost gets in the wall; it is hard to control it.

Under my old building, where I have kept from 100 to 150 colonies, it was provided with an inlet and outlet of

air. We insisted upon opening the cellar doors evenings. Since then I have put in an outlet ventilator and an inlet ventilator.

The bees are put in the cellar the forepart of December, and although our vegetables are in the same cellar, we can go in and out and hardly know there are any bees there, and by the way, indirectly, my daughter taught me a lesson—not to go in the cellar in the wintertime with a kerosene light, for vegetables. The additional light has a tendency, if we stay long enough in the cellar, to induce the bees to come out.

So we simply took a box and put a tallow candle in it, and the light comes out then only on one side.

In my outyards where I would not have the convenience of a farmer's cellar, I have built cellars upon sloping ground, with the building above for extractor.

I have put in over 100 feet of 4 inch tile, going in underground; a foot wide boards nailed together running from the back of the cellar up through the building to the roof.

I went out yesterday to this cellar, where the bees had been in now about two weeks, and I had not seen them since to know their condition. We have had pretty warm weather in Wisconsin; there is this ventilator coming from the bottom. The door I can open or close at pleasure. The temperature was 46 degrees. I walked all through the cellar and finally heard one bee; the rest were as quite as could be. I took a match and placed it at the inlet and it was soon blown out. In the winter there will be frost at the top of this ventilator, showing the moist air has gone out.

Where the heavy losses occur in Wisconsin, is where the walls are exposed. In this one case, it could not very well be avoided; the basement of the building was high. He decided to build an inner wall so as to have dead air space, he had a furnace in the cellar, and the loss continued as bad as ever. I suggested that the following year he haul straw and bank up the outside with that; cover it over if you please to avoid the farmer appearance of the straw, and he did this and wintered his bees nicely. Since then he has made a cellar similar to those I spoke of with the entire wall below the surface.

Mr. Dadant—I would like to call the attenion of the Convention this evening to the fact that we have not very much for our program and we will depend ou your questions. Really the life of a good meeting depends on the questions asked by its members. If you cannot think of anything you want to know, ask questions about something that you do know so that you can get up and tell about it.

Question—In the marketing of honey, has any one tried the Parcel Post and with what success?

Mr. Bull—I shipped honey by parcel post; you have to seal the cans with solder and then box. Sometimes they get pretty rough handling in the mails; if you don't seal them with solder they will break open. I have shipped them, without, sometimes and they went safely.

Mr. Dadant—I don't know whether you all know that after January 1st the weight limit on the first and second zone will be 50 lbs. with reduced rate, and in the third to 8th zones, the limit will be 20 lbs., with correspondingly reduced rates.

It seems to me this will be an excellent opportunity for all bee-keepers to furnish honey throughout their neighborhood and outside their neighborhood at reasonable prices and plenty of it.

I saw a little advertisement in one of the farm papers the other day. It was one of our honey dealers in Indianapolis, Mr. Ponder, advertising some honey by parcel post. We sent for a can to see how he put up his package. We got a six pound can made exactly like the 5 gallon can, with 3-4 inch screw cap; it was packed in corrugated paper, tied up tightly, and the honey came through in excellent shape. The honey was partly granulated. The trouble with the friction top, is that it has to be soldered, or with the least throw that friction top flies off, but with the screw cap you will find it a great deal safer than the ordinary friction top pail.

Mr. Bull—The only reason I don't use a screw top can is because I would have to carry two different cans.

Mr. Cavanagh—How about the convenience to your customer after it has candied?

Mr. Bull—In one instance he has got to cut the top off and in the other he has got to cut the top off without melting.

Pres. Kannenberg—Has anyone else had experience with the Parcel Post?

Question—Is alfalfa honey always white?

Pres. Kannenberg—Who raises alfalfa? He ought to know. Does any one hear raise alfalfa?

Mr. Pyles—I don't. I presume if this man from California who produces honey as red as blood, if he had alfalfa honey it would all be red.

Mr. Russel—I used to live in Colorado. All I ever saw was white.

Mr. Pyles—Mr.————reports some 10,000 lbs. of honey as red as blood; I think the sun must have shone through colored glass, or something.

Mr. Wheeler—I would like to ask the gentleman how he knows it is alfalfa honey?

Mr. Russell—The only thing they have is alfalfa.

Mr. Wheeler—Have you seen the bees working on it?

Mr. Russell—Yes; they don't have anything else but alfalfa.

Mr. Wheeler—I know they claim that, but I never saw a man that could positively say he saw the bees gathering honey.

Mr. Dadant—How about white clover honey; is that always white? In Michigan we had several exhibits of honey, and one can of white clover honey was almost as white as alfalfa. We think we have pure white clover honey sometimes but it is never as white as alfalfa. This can that was on exhibition in Michigan was almost as white as alfalfa.

Mr. Kindig—I do not know the author of this article—but I saw an article written by a member of the California State Bee-Keepers' Association to the effect that the color of alfalfa honey in California was sometimes a light amber.

Mr. Bodenschatz—Mr. Chairman, I think it depends a great deal on the soil where it is produced. I know this is so with sweet clover; white clover and sweet clover in my part of the state is different than it is farther away, say eight or ten miles.

I have read what several western bee-keepers have to say in their writings and they claim that different soil has something to do with it.

Sec. Stone, wishes to add to this discussion, what he saw when judging honey at the Oklahoma City State Fair in 1912.

All their native honey was more or less of a reddish color—alfalfa and all. When we came to judging the samples we came to one man who had as many samples as any one of the exhibitors and boasted they were all his own raising, and therefore he expected the first premium on samples—(although they could go any where for their samples.) So many of his samples looked alike that we began tasting, and found that about a half a dozen of them were so nearly pure honey—dew honey that we could not tell what else they had in them.

Of course he was offended when he was awarded the fourth premium. But as an evidence of our being right—the man who got first—after the judging was over (for the exhibitors were not allowed to talk to the judge except in presence of the superintendent) came to us and this is what he said: "You are the first judge we have had that was not bought off by that fellow; we all know, and he knows that all our honey this year is badly mixed with honey-dew."

As to alfalfa honey, I don't believe there is any gathered around this part of the country; at least I never have seen the bees work on it, and we have quite a little around my part of the country.

Mr. Bull—I think the soil does not have as much to do with it as the season, sometimes. You take in the same apiary, from year to year sometimes the color will vary. My white clover is sometimes very nearly water white and sometimes it is not.

Miss Holmes—I think the weather conditions have something to do with it. Our early honey season was very dry when we got our first honey, and later we had rain and our cappings were darker.

Mr. Wheeler—I have a question here I will read:

Question—Shall the National Bee-Keepers' Association continue as it is or go back to the old way of each member having a voice in the proceedings?

Mr. Wheeler—I would like to hear from Mr. France while we have him here.

Pres. Kannenberg—Of course we were represented at the National Convention; our representative at that Convention is not here at present; he is to make a report on what took

place last year. Mr Cavanagh is to give us that report in the morning.

Mr. Wheeler—Then I will withdraw this question until morning. I was hunting around for some question to ask.

Mr. Pyles—Mr. President, I understand the discussion of this question will make no difference as to the delegate's report. The question is—What does the membership want? That is, I believe, what Mr. Wheeler is getting at, and for my part I would like to ask Mr. France while he is here, to tell us what he thinks about the matter.

Mr. France—They are all waiting for me to get up. I will say I would rather not talk of this matter under discussion.

You know what the National has been, and what it is.

The one great regret to me is that: —(In my office desk I have a copy of the National Bee-Keepers' Conventions from the first until up to the time it was changed to this delegate system.) To think that the old National Conventions are no more. To be able to go there and look at the faces of those whom I have met, and to be able to meet with them again was a source of great pleasure and benefit—but there is no more anticipation in looking forward to those meetings. To me this is a regret.

There were things that we had under way of development under the old system that now are not taken up—and what the outcome will be I am unable to say. I would like to see it progress.

Pres. Kannenberg—I think, for my part, we had better let this go over until tomorrow, and when we have a report from our representative we can take the matter up for further discussion. I think that perhaps would be better than to discuss it this evening.

Mr. Pyles—I was only thinking of the fact that Mr. France is here and I didn't know whether or not he would be here tomorrow. I never talked this over with Mr. France, although I think I know nearly where he stands, and perhaps some of you know how I feel about this matter.

I had not at all intended to take this matter up myself tonight. It is not necessary for us to discuss this pro and con until after we get the report from our representative. I only wished to hear what Mr. France had to say, and don't insist on anything further.

Mr. Duby—I have been a member of this old Association for a number of years. I was getting so I liked the way of its proceedings, and since it changed its method, I have watched it very closely, and I agree with Mr. France, I regret the step they have taken, and although I don't want to predict anything—I will say that I am afraid that the Association is not doing what they were doing a few years ago.

I have been following this matter for sometime, and have been looking it up, and I am sorry that they have adopted another system of management entirely different from what they were doing—and from what I have heard, I understand there are a number of members of that Association that certainly do regret it, and are not in favor of the change, and were not when the change was made.

Those that were at Springfield a year ago this fall will remember that after quite a discussion regarding certain propositions, most of us were against the change.

Of course we suppose it is going to turn out for the best but nevertheless I am very sorry that the change has taken place. I think we were just about ready to do something and almost to the point of doing it.

Pardon me for making remarks about this, but I don't suppose I will be here in the morning, and I felt like saying something in regard to this matter.

Mr. Wheeler—I would like to ask Mr. France one question: With reference to changing back. If the National wanted to change back—We are all in the dark in regard to it—may be you (Mr. France) know.

Mr. France—As I understand, when the Committee at Minneapolis met at the last annual meeting of the old Association, they made their decision in this matter then. When I was called into the Committee room I was instructed by the Committee in charge that they had decided the old National was adjourned, sine die, to take effect January 1st, following, and that same day a new organization would be formed, independent of the other. The other would be a thing of the past.

That is the condition under which the new one was organized.

Mr. Wheeler—I understand then the

people voted on that question and voted to sine die the organization, or did these Officers.

Mr. France—It was submitted to a vote.

Mr. Wheeler—Or was simply the change submitted? I thought the change was submitted from one form to the other.

Pres. Kannenberg—Mr. Cavanagh has arrived and we might have his report of the National Bee-Keepers' Association of last year.

Mr. Cavanagh—Mr. President: As you will no doubt remember before I went to the National Convention I took particular pains to ascertain the pleasure of this Convention in regard to certain matters, and in particular, the matter of the Bee-Keepers' Review and its purchase was emphasized.

When we arrived at Cincinnati we made great plans to find out just how things lined up, and we thought we knew pretty well what we were going to do, and what we were going to accomplish.

I put the question before the house as to whether the buying of the Bee-Keepers' Review was a business proposition, and a good move financially for all parties concerned, and we were making very good headway in determining that question, when the question was brought up, and decided, that whether it was a good move or not according to the Constitution of the National Bee-Keepers' Association it was decided to purchase the Bee-Keepers' Review, and that purchase stood—so all this talk was irrelevant as to whether we would confirm the purchase of the Review or not—so at that stage of the game there were several of us decided to retire in as good order as possible.

The Review having been purchased, the question was how to make it a profitable investment for the National, and I served with the committee, to formulate plans for the most advantageous use of the Review which we had purchased.

You people who have taken the Review are no doubt familiar with what it has accomplished in the meantime—the plan of securing subscriptions—the plan of advertising goods, for the benefit of its members—as to bee supplies, the attitude of the bee supply men, et cetera, was discussed, and we thought it advisable, after due consideration, that we should not push our goods in a way that would conflict or give offense in any way to our advertisers, because you know the success of any publication depends largely on securing a due amount of advertising.

Of course I was put at a little disadvantage, going down there with a misconception of the true situation of affairs—and really we didn't any of us realize our constitution read as it did until some one in the crowd had figured the thing out from a legal standpoint, and read the article of the constitution, which plainly showed that the Directors had power to purchase the Review, and had purchased it, and it simply remained for us to pay for it and ascertain later as to whether or not we had bought something we wanted or something we didn't want—and the only thing to do then was to make the best of the situation as it stood, and we tried to do that.

We had such men on the committee as Mr. Dadant, Mr. Burton N. Gates, Dr. Surface; and Mr. Tyrrell, being the Editor of the Review, should be in a position to know better and to advise as to the probable best plan; and the Official Editor, Mr. Townsend, was also on the committee. Mr. Townsend, as you know, is now Editor of the Review, for the present time being Chief Editor and there are several Associate Editors.

I believe soom good things have been accomplished by the Review in the past year, and it seems as though the whole proposition will work out nicely and for the benefit of the members of the National, and for the social good of the National Bee-Keepers' Association.

We are getting a great many new members, and I believe the subscribers are standing loyally by the Review and appreciating the efforts that are being made for the general welfare of the members of the association.

While some of their policies in regard to the Review did not coincide with my ideas, we had quite a little dispute over it, but I was overruled, but doubtless if we surveyed the Review as the editors do, may be we would find them entirely in the right, and I feel very anxious to give them a chance to show what they can do in working out what I consider a difficult problem.

One of the chief disadvantages in handling the Bee-Keepers' Review by the National Bee-Keepers' Association has been—lack of funds.

Mr. France, as you know, has been

General Manager of the National Bee-Keepers' Association, and has done more perhaps with the small amount of funds he has had to work with than any other man has ever done or ever can do.

We have two main sources to look to in securing funds, one is the subscription money for the Review and the other membership fees to the National and to the State Associations.

The question came up as to how to divide these—what was the most advantageous way to present this to the members of the National and the subscribers of the Review.

We did not wish to give offense to either one and wanted to make the proposition come as a drawing card to both.

There has been little time to tell you much about it, and I don't know what has been accomplished any more than you do through the pages of the Review.

I trust the thing can be worked out satisfactorily. Mr. Townsend has put forth a great effort to make it a success. Mr. Townsend is a scientific, practical bee-keeper. We cannot expect that he has the ability of S. S. McClure or a man who edits a newspaper in the city. He is probably as able a man as we can pick from our midst. The fact that he is a scientific man and has the support of scientific editors of bee-keeping in general will tend to help the Association to get to its feet and keep there, and I am sure we are willing to contribute our hearty support to the Review and to the Association, and accept the situation as it really is.

We have purchased the Bee-Keepers' Review and that is all there is to it. It was all done in good faith, and they are all working in good faith now, and we trust that the move will be proven ultimately a good one.

Mr. Wheeler—I want to ask Mr. Cavanagh one question:

Does the Review go with the membership without any extra pay, or do we pay $1.00 extra?

Pres. Kannenberg—It goes with the membership.

Mr. Cavanagh—The subscription and the membership are included in the one fee. The membership includes the subscription to the Review.

$1.00 a year pays for both, as I understand. I am almost confused myself as to what the actual arrangement was because I have had a good deal of chewing the rag with them. I had some ideas myself which perhaps were more original than practical, and I really confused myself on the question, in writing so much on the subject and in arguing on it.

I thought I knew about it and didn't take the pains to look into the Review when I went down there.

It was all published in the Review. $1.00, I believe, includes the subscription to the Review and membership in the National, and $.50 to the State.

Mr. Cavanagh—I went down to that Convention with a few preconceived notions which I believe were entirely justified—but there was one little simple fact that stuck right out and got in our road, and that was, the Bee-Keepers' Review had already been purchased, and we didn't have anything to say as to whether it was a good move or not. The question was—How to make good with the proposition.

I don't see that there is anything gained now that the thing is settled in finding fault with what has been done. We have the future before us, and we have, if we wish, a chance to elect another delegate and send him before that body called the National Bee-Keepers' Association, and let him try it over again.

When I went down there (I don't think there need to be any secret about it) we thought we were up against a machine at that time. I won't say now what I think, or whether I think anything. We were firmly convinced we were up against a machine when we went down there.

Several of my worthy colleagues and myself went down there with the idea that we would put a stick of dynamite under that machine and burst it.

We thought we had right on our side and we were going to present our view of it in such a manner before that Convention, and put some questions to them straight from the shoulder, as to whether it was a good business proposition to buy the Review—as to how we were going to pay for it—as to what the Review had paid under Mr. Hutchinson's management as to what it might be expected to pay under the future management—where we would find a man to edit it—as to how we were going to raise the money—as to how much money we were going

to get from the Review over and above what we did with our ordinary National Association report, and a few things like that, that were, we thought, to the point, that would clear up the whole matter.

Prof. Surface put in some good hard licks, and a few other boys stood ready to follow us up any time we made the grand charge—

But when they decided in the meeting that they had bought the Review, and it only remained for us to pay for it—why I didn't see that there was very much more to do along that line.

I think now the only thing to do is to make the best of the future.

I didn't favor the plan of buying the Review, but all I had to do was to accept the situation as I found it to be, when in Cincinnati, after it was proven that the National Bee-Keepers' Association had already purchased the Review, done so in good faith, and under the Constitution.

Mr. Bull was down there, and I think he will bear me out in the statement that we were ready to make the charge.

We started the charge on the enemy, as we considered it at that time, and we ran against a snag and had to back up, so we went ahead and tried to make the best of it.

I was one of the committee, and I suppose if I had been the whole committee I would have botched the thing up worse than the others did.

Mr. Pyles says, "We hope for the best", and so far as I see there is no use in getting up and criticising what has been done.

The best thing, after we have purchased a piece of property, is to make the best of the situation and help the people that are back of this undertaking to make the most of the National Bee-Keepers' Association and the most of the Review. It is well to make the most of the situation as being for the best general good.

Mr. Cavanagh—I went down to the Convention at Cincinnati as one delegate and found we were up against something that we didn't realize.

None of the delegates understood the Directors could buy the Review, but when they came to look the situation over according to the amendments to the Constitution of the National, the Directors had the right to buy it.

You want to remember—we are the owners of the Bee-Keepers' Review at the present time. There is only one body that would buy the Bee-Keepers' Review and that is the Bee-Keepers' Fraternity—and we are "it". We have been the subscribers to this Review and we are the only people this is valuable to.

It may be worth $100.00, $1,000 or $10,000 to us, but we are the only people it is worth that to.

We are thinking of the ultimate effect financially.

I do not think it good policy, or that there is anything to be gained by letting it go. We own the Review at the present time according to the decision of every one of the National Association and affiliated societies represented at the Convention, and as we have it, and as it is evidently worth more to us than to any one else, I think we had better go a little slow on doing anything that will damage the Association or the Review.

We are up against a question that is business policy now, and we don't want to do anything to hinder what progress has been made.

The Directors had bought that Review, and all we had to do was to pay for it and make the most of it. Whether we liked it or not whether it was a good move or not—whether it will bring the money or not—has nothing to do with the question.

The question now is—How to get out of it to the best advantage and satisfaction of all concerned.

The Bee-Keepers' Review is not paid for yet; my understanding of the matter is that the Review was bought under contract—

Mr. Dadant—I am not sure as to those details.

Mr. Cavanagh—A good many of the members of the National almost overlook the fact that the Review has to be paid for.

The proposition somehow of paying for it got away from me—but if it has been bought, we have to pay for it and make the best of it.

I think we had better be careful about putting a lot of things in the minutes and letting them go out. It will be a damage to the Association. It is not a question of relieving our feelings or anything of that kind.

The thing for us to do now is to get busy and see what we can do to make the thing a success. It is going to be hard but it is the best we can do.

I don't think they have money enough behind it.

A proposition I put up is to charge something for it and give the subscribers something for it.

We are not afraid to pay $5.00 if they can show us the National is going to be a benefit to the fraternity, in selling their honey, and to the members who are buying supplies.

The trouble is we are organized on a basis where we have too little capital to do business.

It is a good time now to talk the matter over, before the next National meets. What has been done in the past is buried; we have nothing to do with that; the thing has gone through, and the future is before us.

Mr. Pyles—Mr. Cavanagh, when was this constitution adopted and when were these amendments adopted? Who made the amendments and who adopted them?

Mr. Cavanagh—I don't know when they were adopted. The were in print I suppose over a year before.

I wonder if Mr. France cannot tell us when these were adopted?

Mr. France—By vote of the Association I sent out 3,000 ballots and a little over, to vote on this subject. There were about 150 returned, or voted, and it was decided by the vote of those who voted. On January 1, 1912, the new constitution took effect; the old was dead; but I can't for the life of me see how later on a part of the Board of Directors voted in favor of, and some bitterly opposed the purchase of the Review, and we as members of the new National organization are personally held, each one of us for our share of that $1,000. Note signed by the President of the National Association, and in case it shall fail to make a success of it, it can fall upon us as stockholders to make good the balance.

Mr. Pyles—This calls out the question: Was this constitution submitted to a vote at that time, word for word, as it is now?

Mr. France—Yes.

Mr. Pyles — Then there was no amendment since that? I understand there was an amendment that allowed the Board of Directors to do these things. When was that submitted? There was no chance for the delegates to pass upon amendments to the Constitution if there was no meeting. Who made this amendment to the Constitution?

Mr. Cavanagh—I don't understand that there was any amendment. I believe it was in the Constitution itself. I did not intend to say—amendment.

The whole thing as it appears is as though the promoters of this new Constitution were more interested and took more pains to understand it from begining to end than any one else did, and that the majority of the bee-keeping Association were so meek and trusting, they said simply—"bring on the medicine and we will take it"—and now that we have swallowed the whole proposition and consented to it by not saying a word, I don't know any other way but either to stay in and make the best of it or climb out.

The condition is most deplorable, but all bee-keepers have got to face it. It seems by the vote of 150 members, where 3,000 were consulted, this action was decided upon. It seems to be those that were most interested in voting for it that were in favor of the new Constitution.

A whole lot of others didn't know enough about it, nor care enough about it, to wake up and find out what was going on.

Mr. Smith—I would like to know when I pay $1.50, what I join? I thought I joined the Northwestern Bee-Keepers' Association. Do I subscribe for a paper and a premium and several other things?

Pres. Kannenberg—You will get the paper next month.

Mr. Smith—I have joined the National Bee-Keepers' Association?

Pres. Kannenberg—Yes, and you are entitled to the Review.

Mr. Smith—Is the National Bee-Keepers' Association incorporated?

Mr. Cavanagh—No, it is not.

Mr. Smith—It seems to me there ought to be a resolution passed by this organization that we join the National Bee-Keepers' Association, or how is this done?

Mr. Dadant—There is a resolution passed each year, and it is taken for granted we will pass it this year, and we ought to pass it before we do anything further. I can't say what our Constitution says on the subject, but I know it has been the custom ever since I have been Secretary, to pass a resolution to join both the State and the National at each meeting.

Mr. Cavanagh—I would like to ask if there is not some one in the room who has complete copies of the Bee-Keepers' Review?

Is there some one here who has copies of the Review giving the proceedings under this new Constitution? If you have will you bring then in the morning?

A member—I will bring what I have.

Mr. Cavanagh—I will tell you what the situation was when we went down there. The fellows who made that purchase were in pretty hot water.

A good many in the convention started out on the proposition of what a pitiable condition it would be if those fellows who bought the Review had to pay for it. I told them it was not a personal issue. I told them if they had made a mistake and contracted for something they had no right to contract for, I didn't think it was right for the Bee-Keepers' Association to pay for it.

Mr. Tyrrell made the statement that he was not very particular; he didn't have to sell the Review; he didn't want them to think they were having it forced upon them. He made a very diplomatic talk, which was all right in its place. Mr. Tyrrell was a business man and he had a paper to sell—but the whole thing rounded right back to the point from whence we had started—if it had already been bought.

We argued the question very hurriedly as to whether we had bought it or not; as to whether it was possible for the Directors to do that—but after the convention agreed and decided they had bought it, there was nothing more for me to say.

I went down there to represent this Convention—that is what I was sent down for—and if I failed in upholding what I was sent for, it was not intentional. I certainly tried to get to the rock bottom of the thing.

Mr. Miller—If the Constitution is not right, would it not be best for us to take steps to make it right? We could start such a thing.

Mr. Dadant—It is out of the question for us to amend it except through our delegate. We have the right to send one delegate for every 25 members or fraction thereof. If we have forty members, our delegate will have two votes. We gave Mr. Cavanagh instructions last year.

Mr. Cavanagh—We do not want to forget if we make any amendments they have got to be in about ninety days before the National votes on the thing. That is a kind of bad proposition. Some of us get busy and forget about it.

Mr. Pyles—I think I understood that any amendments to the Constitution would have to be submitted. We have the right to ask the National to amend their Constitution.

Mr. Wheeler—The point I was trying to get at is that we were able at one time to change the Constitution to this new form, now why can't we go back to the old if we prefer it? The Chicago-Northwestern cannot do it, but all the Societies want it I should think they could vote it back.

Mr. Pyles—Before it was submitted to the membership vote, and now it will have to be done by delegate vote, and we as a membership have nothing to do with it. When you get under the delegate system it is easier to handle a few men that a great body.

The Modern Woodman of America has gone into the delegate system. The membership had no vote, and then they passed an enormous rate, and the members have to pay it. We shut them off with an injunction.

We might have gotten an injunction against the National so that they could not have bought the Review, but the membership knew nothing about it—they knew nothing about what was going to be done until it was done. I think somebody put something over on us.

Mr. Duby—When a man has the courage of his conviction and he lives up to it, he ought to be applauded.

If I hire a man I have a purpose in view and I expect to be "boss".

I represent a member of the National Association, and I think we ought to pass a resolution and put a little ginger in it, and tell the National what we think of this.

I am highly in favor of resolutions and making them strong.

What is the use of sending a delegate, the way it goes? He is run down. Everything is fixed beforehand. They don't care about a delegate any way, and if they have done anything wrong, and personally I find that something has been done wrong; it seems somebody has some personal interest in there.

I felt at Springfield a year ago that

some one in the National had a tooth to pull and they wanted the Association to pull it and pay for it.

If they have not done right, let them know it; let them know that we don't approve of it. If we are going to do anything, let us put it in a strong way and let them know and feel what we think about it.

Mr. Cavanagh—Mr. Duby wants to take into consideration—it is not how forcibly but how legally we can do this thing according to law.

One hundred and fifty of us have voted for the Constitution of the National Bee-Keepers' Association. Some times right is better than force.

We had plenty of force and whirl right on our side but we were a little bit lame on the simple proposition that we had consented by keeping still about the Constitution which gives the Directors the right to buy anything from a $5,000 automobile up and charge it to the National Bee-Keepers' Association.

I do not want this Convention to think for a minute that I did not take my six shooter out. But the thing was there, and in black and white, and they got up and read it.

It had been adopted by those of that 3,000 membership that had been consulted, those that replied when the notices were sent out, so we are to blame if they put it over on us, as has been suggested here.

There were some pretty hot things doing there. We would have floored it and they would have had to pay for it themselves if it were not for the fact that it was proven that according to the Constitution we bought that Review.

There is no use going down there with a great big bluff and a lot of noise—we have got to go down there with right on our side, and change the Constitution.

If we want to do a little work on the side in the way of correspondence to other delegates, or will go down to the Convention—if we want to frame anything up that is legitimate and legal, we could do that. If we have had anything put over on us we can take such steps as are right, but there is no use in our thinking we can go down there and knock their blocks off because that won't get us anything.

Mr. Wheeler—Would you favor curtailing the power of the Directors? Or would you favor raising the dues?

In case you went back to a change in the Constitution, would you change it in the way of raising the dues, or would you curtail the power of the Directors so that they could not do this again?

I think I would do both. I don't think a half dozen men should get their heads together and decide on a certain thing and make a purchase without the members of the National being consulted.

The National members may have voted to change the Constitution but they didn't vote to buy that Bee-Keepers' Review. They (the Directors) bought it, and we have to pay for it because they have the Constitution on their side.

I don't believe any of the Bank Directors down our way can go ahead and buy a piece of property.

Mr. Duby—Being as it is now—are we going to get a report? Are we going to find out how much money has been paid in—how many members belong to the National Association? Are we going to find out this and that—such as we used to in the old days. Why should we not? Haven't we got a right to?

I have been reading the Review ever since it has been bought and have had every copy of the Review since it was purchased, but I never saw a report. Shall we see it or shall we not?

Being a member of this Association, I would like to know how many belong to it and what is being done.

Mr. Cavanagh—I would like to ask Mr. Duby if he takes the Bee-Keepers' Review?

Mr. Duby—Yes, sir.

Mr. Cavanagh—As I understand it is proposed to publish the financial report in the Review. I think they intend to. They should anyway.

But the proposition the way it looks to me: I feel we ought to discuss this fully, find out what has been done from a legal standpoint, the moral right, and formulate some plans while we are here.

It seems we ought to get this thing lined up as to what we are going to do—get the copies of the Reviews and bring them here, and having these Reviews before us and these reports, and the way the thing was purchased, we

ought to consider it from the standpoint of right.

I think we should talk it over freely. If we find it was an imposition for 150 of these 3,000 to put the Constitution over and that they have done something that is a detriment, we should take proper steps to right the wrong if we can.

It looks to me as though it were an absurd proposition to buy a paper without consulting the stockholders who have to pay for it. Taxation without representation! This violation of moral principle caused war in this country.

Tomorrow morning we will have these Reviews and every member ought to find out what has been done and get on his feet and talk.

If we have a man who is a lawyer, let us get at it from a legal standpoint.

We have a right to propose an amendment to the Constitution if we want to.

Mr. Duby—It is now getting late and we are not talking BEES. I think we ought to change the subject and wait until tomorrow morning, or else appoint a committee, and think the matter over.

We have wasted a great deal of time here. I think we ought to drop this question at once.

Mr. Dadant—I move that the Chair appoint a committee of three to look this matter over and write out a resolution, or probable amendment, which should be proposed at the proper time and place.

Motion seconded.

Mr. France—I believe, although I would like to join with you in that, that you are again handicapped.

It is too late to offer amendments to go before the coming meeting of the National Association. They will overrule that. It has got to be ninety days, and it is not.

Mr. Smith—We can offer it for next year; then we will have plenty of time.

Mr. Pyles—That appeals to me; then we will be on time.

There is something else to that which also appeals to me.

You understand this report will be so censured that we will not know what we have said.

Also the report of the National Bee-Keepers' Association was so cut down in the report that is published in the Bee-Keepers' Review, that nobody would know anything that went on.

What it took two or three days for that Convention to transact was put in the report in a very condensed manner, so you understand that was censured just as bad.

We know nothing of what has been going on in the convention of the National Bee-Keepers' Association. I don't believe in the Chair allowing anything to go before the house that should be censured.

A member—It seems that we are members of the National Association. We have adopted this Constitution and we have got to do things according to the Constitution as it is.

We won't have any time to make resolutions or to make changes in the Constitution to go before the next meeting.

It seems the Board of Directors have done something we don't approve of.

The thing we ought to do is to put down on paper some forcible criticism of what they have done. That will start some movement that will bring something out later on that will bring about a change in the Constitution later.

The motion is that the Chair appoint a committee of three to look this matter over and write out a resolution or resolutions, or probable anmendment, which should be proposed at the proper time and place.

Let us have such a committee appointed, and let them thrash out things.

We don't know what the Constitution is. We don't know the circumstances as a whole. We don't know what has been done and who did it.

We are at sea. Let us have this committee appointed to look into the matter. That is all right.

As to this being a legal thing for the Board of Directors to do these things—it seems according to the Constitution we have, it is legal. It is proper that they should assume such authority. Somebody must be in a position to assume authority.

The membership thought this change in Constitution was advisable, and afterward we found out we didn't think it advisable but we did not say so.

The thing to do is to consider a change in the Constitution, and we have got to do this, through a delegate —not at out next meeting, because we have not time for this—but let us start

some sort of a movement in the way of censure.

Let us have a committee appointed, and let them look into this Constitution, and see what has been suppressed, and let this committee bring in a report to this convention for us to consider.

Mr. Cavanagh—It appears to me that a vote might be a good thing all right. If we make this vote now, and send a delegate to represent us. It is within the ninety days now.

Why can't that amendment be put through and go into effect at that time, provided we can secure enough delegates from other associations to carry it?

We can get busy now. It may be that several of the other associations think as we do—and we do not have to have the National in session in order to do this. I think you will find that we can put this amendment through now, and we don't have to have the National in session in order to have this amendment to the Constitution made effective.

A member—It will have to be accepted by the Board of Directors and that can be done at any time without the membership passing on it.

Mr. Dadant—Has any one the Constitution?

Mr. Bull—I make a motion that we put this on the table until we find out what we have been talking about.

Mr. Cavanagh—I made a motion the Chair appoint a committee.

A member—The question I am trying to get at is this motion to lay upon the table—what do we wish to lay on the table—this proposition? We are just putting in the entire evening doing nothing; if we don't do something now nothing will be done—and now is the only time we can do anything.

Pres. Kannenberg—The motion is to appoint a committee to draw up a resolution for the amendment of the Constitution of the National.

Are there any remarks? If not, all those in favor say yes.

Motion carried.

Pres. Kannenberg—I will appoint on that committee Messrs. Pyles, Cavanagh and Duby.

Mr. Duby—I cannot be here in the morning.

Pres. Kannenberg—Brother France, would you take that? I will put Bro. France on that committee instead of Mr. Duby then.

Pres. Kannenberg—We have a few questions now.

Question—What is the best way to start a bee smoker?

Mr. Cavanagh—With fire.

Mrs. Pyles—Use a match.

Mr. Wheeler—That depends on what kind of a smoker it is.

Mr. Dadant—I suppose the one who asked that question would like to know about the fuel?

Mr. Pyles—I usually start a fire with shavings, and that is a nice way to start a fire, but accidentally one day I found this: I used some heavy corrugated paper.

You would be surprised to see what a fire it does make and the smoke is thick. You can get as much smoke as you want by puffing the smoker. It is easily started and won't go out as long as there is any paper to burn.

Mr. Duby—Cotton waste makes an ideal smoke—no odor, no flame. It helps to keep the smoker practically clean. I like cotton waste.

Mr. Pyles—If he had anything like two or three or four hundred colonies of bees and he went out on the railroad to hunt for waste to keep the smoker burning, he would spend a great amount of his time.

Mr. Bull—Go to any garage and you will find greasy waste.

Mr. France—in connection with this waste—did you compare the smoke made by the burning of waste with other things—as to whether the bees like it? Oil substance used in the smoker, it is my evperience, makes the bees cross.

Mr. Pyles—You have got to get an old pair of gloves to build the fire, and take them off, or else your hands will get greasy and smell. You get that smell on whatever you are working on; I don't like waste myself.

Mr. Duby—This is a false impression made by Mr. Pyles about the waste along the railroad track. If you pick the waste where I usually find it that waste is pretty dry and it makes no odor I know.

Mr. Pyes—Of course, Mr. President, along the Indiana line they suck things so dry over there; it is not that way over our way; we get oil.

A member—Rotten wood makes good smoke—wood that you can pick up—

have it good and dry—and it is the cleanest stuff you can get.

If you blow it on the bees the chances are you get the effect of it afterward. Rotten wood is the best stuff you can get.

Mr. Cavanagh—Light a smoker with almost anything you can get your hands on—excelsior—a hand full of leaves—and when that burns down, take a lot of twigs that are about the size of my little finger and break them in lengths of 3 or 4 inches—have the twigs good and dry.

Almost anything will burn in a smoker if you know how to light a fire in the smoker; you have to light your fire before you put it in your smoker.

Let it blaze up a little bit, drop the fuel on, and when it gets a-going, cram it down good and hard.

A member—I use planer shavings, the short kind; I usually turn them over to the wife and let her start the smoker.

Mr. Pyles—I don't have any such planer shavings. They are long shavings. I have them good and dry and they start a fire pretty easy. Mr. Kildow starts his fire with a little kerosene and with old charred wood that remains in the smoker.

But as I have said, if you have not tried any of this corrugated paper—just try some of it, you will find it gives a nice thick smoke.

Mr. Wheeler—Does it last a long while?

Mr. Pyles—Yes it does.

Question—Name the best plan to requeen?

Mr. Duby—Kill the old queen and put a new one on.

Pres. Kannenberg—That is a good idea. Any one else?

Mr. Dadant—Run in the bee smoke method and let the bees kill the queen.

A member—It is now after ten o'clock; I make a motion that we adjourn to meet at 8:30 o'clock tomorrow morning.

A member—Mr. President, I move an amendment to this motion; make it nine o'clock instead of 8:30.

A member—I accept that, Mr. President.

Motion to adjourn seconded and carried, to meet at 9 o'clock December 18, 1913.

Convention convened Thursday morning, December 18, 1913.

Opened by the President.

Pres. Kannenberg—Has the Auditing Committee looked over the Treasurer's book? The Auditing Committee is Mr. Bull, Mr. Marshall and Mr. W. C. Lyman; if they will look over the Treasurer's report and bring in their report—

Pres. Kannenberg—We will start this morning with a paper by Mr. Ahlers of West Bend, Wisconsin—

SOME OF MY EXPERIENCES IN MIGRATORY BEE-KEEPING.

H. C. Ahlers, West Bend, Wis.

I have moved many carloads of bees. I have satisfied myself that bees can be moved in carloads successfully when properly packed and watered enroute by an attendant.

It will no doubt interest the members of this Association to hear what I have been doing with bees the last few years.

During the winter of 1911-'12 my bees decreased from 438 colonies in the fall, to 120 very poor nuclei in the spring. No honey was secured the following summer, but the bees were increased to 380 colonies in the very best condition by fall of 1912. How this was done will be my subject.

As the nuclei became stronger queens were reared from my four best mothers. Divides of two combs brood with adhering bees were made, and ripe cells, built in artificial caps were inserted in cell protectors. After the young queens were mated, one or two more combs of capped brood were added.

I secured the desired count by the latter part of July. All hives were filled out with comb, and July 31st a carload of 282 hives bees, with 282 bodies extra combs were shipped to Illinois, to the Illinois river bottoms.

These nuclei built up to strong colonies, covering two sets of combs in ten frame hives, and gave me a surplus of 2,500 pounds honey from Spanish needle. All hives were left very heavy. On October 25th they were shipped from Illinois to Northern Louisiana.

The bees are now located—one yard at the Junction of Three Rivers. One yard seven miles up stream, and one yard five miles down stream. All navigating is done with motor boat. I have steamer connection with New Orleans and Natchez. A railroad runs east and west.

Following are the results of the past season from these bees:

About 21,000 lbs. honey, 300 lbs. wax, shipped 12—three frame nuclei to New Jersey. Shipped 100 combs sealed brood, and young bees to myself in ten frame boxes, by express.

These latter were divided to 20 colonies, which gave me nearly 4,000 lbs. of white honey; two of these swarmed.

I have now nearly 400 colonies in Louisiana.

On account of severe illness I had to leave in the height of the best honey flow. My man left a week later without notice. The result: About 150 swarms absconded. All hives full of honey for five weeks, with few bees and many hives queenless. The estimated cash loss over one thousand dollars. With all these setbacks, and—some more, the investment paid interest. All honey in this location, except the early flow is dark amber. I sold the bulk of mine at 6 1-2 cents.

My advice: If you want to keep bees in one place only, keep them in the clover belt.

Northern Louisiana is a great honey country—everywhere; but a much greater bee country. I think there is a great future for raising bees and shipping young bees and queens north in the spring. The man in the South can raise them cheap. It will pay every bee-keeper in the North to get enough bees and queens early enough to put every one of his colonies in the very best condition by dandelion and fruit bloom.

I predict that individuals and companies will invest large sums of money in the business. They will run numerous yards in the North and in the South. In spring all increase will be shipped north for the white clover honey crop. This is my plan and I think will pan out very profitable.

The coming spring I will ship my increase by express, just fast enough to keep down swarming. I will ship in wire cloth cages, also combs of sealed brood with adhering young bees.

On arrival each cage will be released on one comb of brood, placed in a hive filled out with choice combs. This method will have advantages over carload shipments for me.

I started the season with about one hundred colonies at West Bend, Wisconsin. These were so strong that it required three to five story hives to hold them. They gave me the same quantity honey as all my bees in Louisiana.

After the basswood flow 75 colonies were moved 35 miles to a sweet clover location, and I secured about 2,000 lbs. more.

All colonies went into winter quarters strong, with about 35 lbs. stores, or more. Nearly all queens were bred this season.

It pays to re-queen **every** colony, **every** year, if you cannot do it yourself, or can **positively** buy good queens. I winter in chaff hives. Some are packed in collapsible cases.

Pres. Kannenberg—Does any one wish to talk on the subject of Mr. Ahlers' paper? We will put it on file.

Mr. Bull—I would like to listen to Mr. Cavanagh on—Moving Bees.

Mr. Cavanagh—Mr. President, do I understand I am on for a talk or paper?

Mr. Dadant—You are on for a talk on Auto Truck and its Inventions.

Mr. Cavanagh—That is what the auto truck does down in my country—move bees around, so I had better leave this for later discussion.

Mr. Dadant—Has any one else here had any experience in moving bees?

While I was at the Michigan Convention last week, Mr. Frank Pease related his experience of only one year. How he went to Louisiana, near Freeport, I believe, and bought something like 300 colonies of bees in box hives; bee-keepers with large quantities of bees down there won't sell at a low price. He paid something like $3.00 for them in box hives; transferred the bees in movable frames—made a crop of honey and sold something like 700 or a thousand pounds of wax—and had a good crop of honey besides.

He is going back this week or next to try the same thing over again. He had pretty good success last year; I understand he expects to increase to about 600 colonies and ship some of them north.

Mr. Cavanagh—Did he ship by carload?

Mr. Dadant—I don't think he shipped anything; he got those in shape last year down there. Mr. Ahlers in his paper speaks about it being a greater place for honey but a better place for bees.

Mr. Pease explanation of the flow down there kind of bears that out; had a flow nearly all the time but not regular; one day a good flow, the next

day, apparently under the same conditions, no honey coming in at all, so that they don't make honey consistently; they make it by fits and starts. I suppose it would be a good place for bees to keep coming along all right but would not hive a great deal of honey.

Mr. Baldridge—I kept bees one year in the city of Shreveport, Louisiana. I found the quality of the honey very fine. In 1876 I had about 300 colonies in Shreveport. I think the flow of honey was quite continuous and was of a very good color.

I never got into the locality where I thought I had all the honey I wanted until I got there.

I have shipped two carloads of bees from New Orleans to Kane County for Mr. Furloin when he was in business there, and then I shipped them back to East St. Louis.

A friend of mine shipped bees from Missouri to Lake County, Libertyville. He shipped his bees in a refrigerator car. The car was iced—and they were a complete success. No matter how hot the weather is, the car is iced the same as for fruits. They went in good shape. It may be a good thing for others to look into this matter of shipping bees in a refrigerator car. Mr. Gradley was the name of the man who shipped bees in a refrigerator car from Missouri to Libertyville.

Mr. Cavanagh—Mr. Ahlers and I have had quite a lot of correspondence in the past on moving bees, and kindred subjects, and I suggested to Mr. Ahlers that he ship in a refrigerator car—an iced car. Mr. Denon also shipped in a refrigerator car, and because of Mr. Denon's success I suggested to Mr. Ahlers that he try it; and he tried it out and with complete success.

I think Mr. Ahlers used a fruit car instead of a regular refrigerator car.

George Denon used to ship bees from his clover location. At one time he ordered a car to ship bees—refrigerator car—and the Pan Handle gave him a stock car instead of a refrigerator car. I told him to use that car—and the bees were put into it and came through in nice shape a short distance over night.

Mr. Ahlers reports good success with a refrigerator car—but I see the A. I. Root Company are using open stock cars in shipments from the South to the North, and I think the box car from the North to the South.

Mr. Baldridge—The cars that we used for shipments from New Orleans up here were stock cars—open cars. I came with them myself all the way.

Pres. Kannenberg—Has any one else had experience in shipping bees?

Mr. Bull—I shipped two different carloads. The first car I shipped was one about fifty miles; I used stock cars; the second car I shipped three hundred miles; I used a refrigerator car, but not iced; I shipped about the 20th of May and used ventilators.

It seems to me if a person could use a refrigerator car with ice and have some kind of a ventilating system, so that when the car stands still you could ventilate that car, it would be an ideal system. It is all right when the car is in motion, but when it gets to where it has to stand out in the sun, it kept me busy carrying water.

I believe if a person had some kind of a ventilating system, if you could run a fan when the car was not in motion and could have ice in the car, it would be pretty nearly the same thing as wintering them.

When the car is in motion you get plenty of good ventilation.

Mr. Cavanagh—Two years ago this fall I wrote a letter to the A. I. Root Company and suggested a plan. They are pretty wise in the bee business, and shipping bees, and they are liberal enough so that they are not afraid to tell what they think.

I suggested a proposition to them like this: Instead of sending pound packages and one-half pound packages of bees, to the express company, put a colony in a cage, with combs to feed on, and ship those in ice in a refrigerator car, with a forced ventilation system—the ventilator to be run by an electric fan, to create circulation. Ernest wanted to print it in Gleanings at that time. I didn't think I wanted to be made to look like a foreflusher. I was not in a position financially to carry it out myself—but since then the Root people have worked into sending bees in about three and four pound cages by express—and I see this year they are sending carloads to the South and they are sending them in hives and are going to make the increase down there.

I had a talk with Mr. Hall on the subject and he thought I was as crazy

as a loon to propose putting 600 hives of bees in one car with the ventilating system, no matter how good. He says they will create heat and they will smother; that you can't keep that many bees in a car.

I suppose they would create a good deal of heat, still I believe it can be done if you go at it right—have the car iced well and have a good ventilation system. I have a foolish notion that may be it can be carried out.

Of course 600 hives in cages would go for less than 12,000 lbs., minimum weight. The chief expense is the freight on bees. I don't know what the minimum is for shipping from the North to the South, 12,000 or 20,000 lbs.

Mr. France—20,000 lbs., and you pay your full car fare.

Mr. Bull—I would like to know how it comes that a man who goes with a carload of bees has to pay full fare? If you go with stock you can go for half fare and get a pass back. Bees do not need so much care.

Mr. France—I made a trip down to Chicago to help Mr. Ahlers. His expense and that of a helper and carfare amounted to an item. The excuse the railroad company made was the valuation—that there was not enough valuation placed on bees, but the man who had stock had some money in it, and it was worth something on the market.

Mr. Bull—Which is worth the more on the market today, a car load of stock or a car load of bees?

Mr. Baldridge—I don't remember that Mr. Perloin paid the fare; I think he made a contract releasing the railroad company of all damages. The bees were shipped in safety. I don't think we paid any fare—but that was a good while ago.

A member—Well, they did not charge then.

Mr. Baldridge—It must have been about 1870.

Mr. Cavanagh—I wonder if this Convention is aware that we pay three times as much to ship a carload of bees as to ship a carload of cattle? I suppose the only reason that they charge us so much is they are afraid they might get stung, so they sting the fellow in charge a little.

So far as the valuation is concerned, if they don't think the valuation is enough on a carload of bees, it is up to us fellows to tell them what the valuation is.

In the first place, bees are valued at too low a price in this country.

In a financial statement I am working up I am putting bees in at $6.00 a hive without super. The hive costs the factory something like $2.50. We have $1.00 of wax that can be rendered—35 lbs. of honey in every hive, which at a nominal price of 10 cents a pound would be $3.50. A whole lot of people don't value bees at as much as they should. In Canada they value bees at $10.00 a hive, and I have had some one tell me this summer about asking $20.00 and $25.00 a hive. A good many bee-keepers sell their bees at $10.00 a hive for good Italians.

Mr. Dadant—Hardly that low in the North. In the South you can buy them for less.

Mr. Cavanagh—But they are not good uniform hives.

Mr. Pyles—If that is the reason the railroad company give we might value our bees at $10.00 a hive, we might secure results.

We are paying enough tariff on a carload of bees and it is an injustice. They didn't use to tax us full fare both ways years ago, but they do now.

Mr. France—As to the valuation of bees, if I remember rightly, in one of our states in the Union under the present assessment roll, the assessor has to assess all bees and the valuation would be $5.00 a hive.

Mr. Dadant—There is one thing about the valuation of bees and that is, they are perishable. For instance, you value your bees at $6.00 in the fall, and if you have a winter like 1911-1912, how much are they worth in the spring?

Mr. Cavanagh—The ones that go through are pretty valuable.

Mr. Dadant—Yes, but how about those that die?

Mr. Cavanagh—You have the combs then.

Pres. Kannenberg—The next thing in order wil be to have an election of officers. Nominations will now be in order for President of this Association.

Election of Officers.

Mr. Bodenschatz—I nominate Mr. Kannenberg for President.

Mr. Smith—Mr. Chairman, I move the nomination be closed.

Motion seconded and carried.

Mr. Smith—Mr. Chairman, I move that the Secretary cast the vote of this Association for Mr. Kannenberg for President.

Motion seconded and carried, and Mr. Kannenberg declared elected as President.

Pres. Kannenberg—The next thing in order will be the office of Vice-President.

Mr. Simmons—I nominate Mr. Cavanagh.

Mr. Pyles—Mr. Chairman, I move the nominations be closed, and that the President be instructed to cast the entire vote of this convention for Mr. Cavanagh for Vice-President.

Motion seconded and carried, and Mr. Cavanagh declared elected Vice-President.

Pres. Kannenberg—I will appoint Messrs. Pyles and Baldridge as tellers, and we will next vote on the election of Secretary.

Mr. Bodenschatz—I nominate Mr. Louis Dadant.

Mr. Dadant—I nominate Mr. John C. Bull.

Mr. Pyles—I move the nominations be closed.

Motion seconded and carried.

Pres. Kannenberg—The result of the ballot is: Mr. Dadant received eighteen votes and Mr. Bull three—so I declare Mr. Dadant elected as Secretary of this Association for the coming year.

Mr. Dadant—Mr. President, I would like to thank you for the election, but I think it would be a wise move to put some one else in; I have held the office for three or four years, and think you can find some one who could do better.

Pres. Kannenberg—I think we have a man who knows all the ins and outs, and I think it best we keep him there.

We have on our program—"Helpful Hints"—Mr. N. E. France.

Mr. Dadant--Mr. France was at the Springfield Association meeting last winter, a year ago, and he gave them there a talk on "Helpful Hints"—on different things that had been used in their apiary, that I enjoyed greatly. I put Mr. France down for a little talk on this subject, and I am sure we will listen with great interest.

Mr. France—I will say I have since coming home from my State Inspector work been as busy as a bee helping my son who had charge of the bees this year, getting the bees in shape, and into winter quarters, so that I have made no preparation and will simply have to give you whatever you want.

What topic did you assign? "Helpful Hints"?

Mr. Dadant— I spoke about your giving us a talk at Springfield last year. You told us of little short cuts that you used that were very interesting, and I know the whole Convention enjoyed your talk.

Pres. Kannenberg—Just give us something about bees.

Mr. France—I want to say that at your Chicago Convention some years ago a lesson came to me that has been worth a great deal, and it may be to some of the rest of you. The question came up of liquifying honey—have it in liquid form for winter.

If I remember rightly, Mr. Wheeler remarked if we would liquify that honey before it began to granulate it never would granulate. And he had the goods, if you please, right here, that had been out doors through the winter and had not granulated.

I tried some experiments since with the result that our honey now as soon as it comes from the extractor is put in temporary storage, which are nothing more nor less than galvanized water tanks.

The day that we finish extracting, we take all that honey in five gallon cans, setting those into a tank of hot water, taking them out from there and straining it, putting it into cans, and I doubt if it would granulate in a term of years. It is liquid all winter, thick, delicious honey, just the kind that I spoke of yesterday, of having 45,000 lbs. and it is all gone, and I would like to find some to finish up the winter market.

If you have not tried it, do so.

If you wait until the honey begins to granulate and then liquify it, it takes more heat, and has a different chemical tendency than liquifying honey early before granulation begins.

Let me caution you—don't have it very hot—simply sufficient to give it a thorough warming.

Mr. Wheeler—What temperature?

Mr. France—I think they had it about 80 degrees.

Mr. Wheeler—Do you have to stir this honey during that time?

Mr. France—It is stirred as poured out into the cans while warm. It is only a few days since it was in the comb. If we wait until it begins to

granulate you have another proposition.

Mr. Wheeler—You are sure that 80 degrees is high enough?

Mr. France—If I remember rightly.

Mr. Whitcomb also had comb honey here at the convention that had gone through the winter and there was no granulation. It was simply put into a room, I believe it was put in a radiator, was it not, Mr. Whitcomb?

Mr. Whitcomb—No, much of that honey was in the honey house that was much below zero all winter and it did not granulate.

Mr. France—What I had reference to was on the radiator?

Mr. Whitcomb—You mean the extracted? Oh, yes, that was 80 or 85 degrees, somewhere about that. The least amount of heat you give it in liquifying it thoroughly, the better, because you save the flavor. If you have too much heat it injures it. Of course everybody who has used extracted honey, knows that.

Mr. Pyles—20 degrees below blood heat then?

Mr. France—It should be heated long enough so that there would be no little granules in it; as soon as that is accomplished there is no object in holding it any longer.

There is one other convenience, in the yard, that I would hardly know how to get along without—and that is, the steam heated uncapping knives.

I tried the various devices, but it so far exceeds any other, I would not be for a moment without it. We keep an extra one on hand in case of a mishap.

Heretofore, before using the steam heated uncapping knife, one man at the honey extractor kept three busy uncapping. Any one of the three can now have time to spare and the machine can be kept hustling. There is but little difference in cost, and I would not be without one. The other two men can have time to do something else.

I have a small oil stove with a single wick. I use a gallon honey can, and have a tin spout to connect the rubber from the knife to the can, and then we find all ready to begin work. The oil cost about five cents a day to have the knife in readiness to do the uncapping.

I think any person if he has but twenty-five swarms can well afford to have one of these knives. It is not only practical, but it does the work faster and better.

We found a little dissatisfaction with having the lamp smell in the room, and my son said—"Pop, I am going to put that lamp on the outside and run a hole through the house." The lamp is in a box on the outside.

I have tried three patterns of uncapping melters, and I prefer to give them a thorough draining, break them up well, and have some kind of a screen underneath; let them drain, and melt the cappings at my leisure some rainy day.

Mr. Cavanagh—Did you ever try to save the honey left in the cappings?

Mr. France—After they have broken up thoroughly and drained, the amount of honey I could get from those would not pay to bother with.

Mr. France—We used to make six or seven barrels a year of honey vinegar by the washing of the cappings, but we found we had to waste a lot of honey, and for the last two years I have dropped the honey vinegar proposition, as we would almost have to take honey purposely for it.

Mr. France—As regards the saving of our extracting combs which are our bank stock.

At Minnesota, this fall, I visited one of the largest bee-keepers of that state, on my way out to the State Fair ground. He had piled up in each of his out yards, his extracting supers with comb in, in a building lined with black tar paper.

The doors were open at that time, allowing the bees to go in and clean out the combs, and then the doors would be closed.

The wax moth had made its entrance while the doors were open and Mr. Hoffman was sulphuring the rooms so as to kill the wax moth. I said, Mr. Hoffman, why don't you use carbon bi-sulphide. But he thought it would take an immense amount.

As we had to go through a little village on the way to the other yard, we got one of those little cans of carbon bisulphide, went over to the other yard after dark, went in and placed the carbon, and the young man went out the next morning on his motorcycle, and he said, "Pop, I guess the wax moths are dead all right; there was a rat and mouse dead in the alley"—and this was all done so simply.

If you want to hold those combs for

a long time and there is any possible chance of the wax moths getting in through a crack, we have learned that the best way to keep them out would be to apply the ordinary white moth ball which you can buy at the drug store, using one for each super. After you once fumigate they will keep the wax moth out.

It don't interefere with the combs when you want to use them for the bees if they are aired for a few minutes; the bees will accept them readily, and this will keep the moths and mice out.

I would rather some one would ask questions.

Mr. Wheeler—Did you find it necessary to use anything?

Mr. France—After cold weather there is no danger until spring, but in the fall, especially a warm fall like this one, wax moths are liable to get in early and it is the warm season we have got to look out for.

You see, Mr. Wheeler, living in a different attitude, the conditions are different than here. When our clover season is over, our honey season is over; and our combs are taken away from the bees much earlier and would be subject to wax moths more than where you have a fall flow.

Mr. France—I tried the experiment of one of our good bee-keepers which was suggested at the National meeting, held in New York—Mr. Cyrennis, of Oswego, who is one of the bright heads of the East. If you will refer to the National report you will find mention made of his short cuts—one was the use of a double brush, brushing the bees from both sides with one stroke—throwing your bees all down on the grass in front of the entrance.

I bought two of those, and although they will brush the bees off quickly—every time we brush the bees in the open air we discourage the bees and make them cross, and lose some time.

We may not think bees time is worth much—but how long does it take from the time of the opening of the honey flow until the season is over, and if we have lost part of a day, it means something. You are subject to a loss by disturbing the bees.

With reference to the feeders which have been brought in here: I would like to see the recommendation of the Association in favor of those feeders—but the principal of feeding bees at the opening of the season before the honey flow is worthy of our consideration.

Some years ago I was asked at our State Convention, how much honey is necessary to winter a swarm of bees.

Granting the bees have gone through the winter and they have got more honey than they can use up to the time the extracting season begins. You can make them swarm still better with a little stimulative feeding. Bees are somewhat miserly—what they have got in bank stock they like to hold. If we would take honey already there and break the cappings, they would use it, but a little stimulative feeding would accomplish the same object.

Speaking of how miserly bees are—the Secretary of our State Association went home from the Convention and took a comb of sealed clover honey, and with the handle end of a jack knife he broke the cappings down across that (illustrating)—and spelled my initial letters—N. E. F. Hung that down into the hive as a feeder; five days afterward he took that out and every cell was empty where the cappings were broken and the rest were untouched.

Mr. Baldridge—A three pronged fork is better.

Mr. France—We increase wholly by division—rather than to allow natural swarming. In fact I could hardly adopt natural swarming and continue to run several out yards.

Now, the one thing that has been a source of pleasure to me the last two years, is to use our head more and save our hands.

We used to turn the extractor by hand—draw the honey into a pail and lift that up into a strainer; and somebody had to watch the faucets or there was a run-over.

Now the extractor is run by a gasoline engine; we have a steam heated knife. The honey runs directly from the extractor through an automatic strainer into the storage tank without our touching it or watching the faucet.

The honey carries itself on below into the storage tank and it is a great convenience, and we can do so much more than under the old way.

A member—Will you describe the strainer?

Mr. France—Attached to the faucet of the extractor we have a tin spout which conducts the honey to the

gravity strainer under the extractor, and under this strainer is the storage tank which holds several tons. The strainer is a galvanized box placed between the joist; the space between the joist is 18″x4′ long, with a partition that runs almost to the bottom within 1.4″. The partition runs across from end to end, dividing the tank in two.

The result is if there is any skum on the honey or little particles of wax, they will hold to the first side of the partition; the skimmings are all on this one side, and you can skim off at your pleasure, and the strained honey is running out on the other side.

The honey being heavier than the sediment would work underneath and your foreign material is on that one side of the partition.

Mr. Cavanagh—Have you ever used cheesecloth?

Mr. France—I have. Gravity straining is much better.

The honey now runs direct from the extractor through this automatic strainer and into the milk cans.

The cans are brought home, and with little pulleys are elevated and dumped into these large tanks that hold 6,000 pounds each; the tank is made of galvanized iron.

Mr. Baldridge—Do you think galvanized iron is good?

Mr. France—If we don't leave the honey in it too long, I can't see that there is any coloring; but if it is left too long it will have some chemical effect.

Mr. Baldridge—There is no trouble in getting the tin that will make a good strong can if we get it where they make the milk cans; get them to hold 500 lbs. for about $6.00.

Mr. Dadant—We have been using galvanized tanks for honey for quite a while. Some tanks get rusty. Take beeswax and tallow, half and half, put the tanks out in the sun, get the wax hot; put on a coat of wax all around the edges and bottom of the tank and they are as good as anything you can have.

Mr. Baldridge—Would the galvanized tank be much cheaper than made of one four cross tin?

Mr. France—A galvanized tank costs about $1.00 per barrel storage.

Mr. Woodman—Do you find that system of great advantage in the uniform blending of honey? We find in buying honey we never know what to depend on, even when buying of the best bee-keeper.

Mr. France—We had that trouble, especially in the days when we run the extractor in barrels; no two barrels would be alike the same day. But by running into this storage tank of 6,000 lbs., we found it would be all the same.

Mr. Woodman—If you send out a sample, you can say you have 4,000 lbs. like the sample. That is a great advantage in selling.

Mr. Dadant—I would like to ask about bee escapes. You were not using bee escapes, Mr. France, two or three years ago. You told me you brushed your bees off. Do these escapes do the work thoroughly in extracting?

Mr. France—I have tried them. There was a Bee escape; I guess it would be an infringement on the Porter escape. With the Porter escape there is a pair of wire springs by which the bees go out; this other has springs by which they go out each way. I got one hundred of those; we put them on our escape boards, but it didn't take us long before we took them off; the bees went out of them and came back and glued these springs together.

I do not think the bee-escapes are handy for use in out-apiaries. The fact that they have to be put on the day before makes it necessary to make an extra trip.

So far as the actual saving in time is concerned, we considered this time spent in going to the outyards equal to the time of putting on the bee escapes. We can accomplish the work faster by system. The boys go in pairs to the hive; the hive is opened by one of them, and at once a little smoke is puffed by the other boy over the honey combs, which causes most of the bees to run below. The combs are quickly lifted out with a hive tool and as they come high enough the bees are brushed off on to the combs below. A soft German bee brush is used to brush them, and this makes a clean sweep of the comb on both sides at the same time.

Mr. Woodman—Have you experimented in heating honey to 80 degrees? Our experience is that after we turn the cans bottom side up several times and mix in the air bubbles into the honey, that is what causes granulation,

and at a temperature of only 80 degress I am positive it would granulate.

Mr. Bull—When I extracted this year I heated my honey before going into the storage tank and my honey I am sure was over 80 degrees in that tank.

Mr. Dadant—Mr. Woodman's point is the air bubbles formed in the honey in drawing off would cause granulation.

Mr. France puts that in 5 gallon cans and never transfers it. It liquifies immediately in those 5 gallon cans.

Mr. France—Yes, sell it that way.

Mr. Bull—You can liquify honey and put it in 5 and 10 lb. pails and let it set there a month or two and it will not granulate, and on the road it will granulate.

Mr. France—I noticed this at the Minnesota Fair. There was a demonstrator there by the name of Mr. Jaeger, of extracted honey. He had mostly clover honey—new combs, sealed on both sides, perfect combs, had several hundred of them. Offered prizes on it to the one who could uncap on both sides in the least amount of time.

To see these different experiments in uncapping comb was worth while; and I want to say that this man, Mr. Hoffman, of Minnesota, beat them all in using the steam knife.

The knife will strike in two or three inches above the bottom bar, running down to the bottom; turn the blade the other way, go to the top, and it is all off at one stroke.

But now turning back to this heating of honey that had become cold and been out of the hives for weeks—First, the extractor had a steam jacket underneath so that the bottom of the honey extractor was that hot you could not bear your hand on it, intending to liquify anything that would need liquifying, immediately.

The pump would carry that up twelve feet and dump it into an Alexander strainer.

My honey when heated stands there until it is all heated thoroughly; then the screw cap of those cans is turned down—sealed while it is hot, and any one of those cans today you can take and pour out the honey. It will be a thick, heavy body, but it will pour.

Mr. Bull—What length uncapping knife do you use?

Mr. France—They make two lengths. We use the ten inch blade.

Mr. France—Many are making the sad mistake in using the steam knife, in that they do not use steam enough and do not have the knife hot enough.

We use a two gallon oil can or gasoline can and put the tube on the spout and cap it tight; fill it one-half or two-thirds full of water, and I can get steam enough to hold me five minutes at a time.

Mr. France—You want that steam shooting off here all the time (illustrating).

Mr. Bull—I use a gasoline stove for mine; I can throw steam that far (illustrating). I use a common gasoline stove and have no trouble in keeping enough heat.

Mr. Bruner—Your can will run dry in about two hours; then you have got to wait until you get up steam again—that is an objection.

Mr. Bull—I find a quart of water will run from two to three hours, however, I believe I will use two or three gallon cans next year.

Mr. France—My tinsmith said to me—"Let me make you a can" and he made a round can, probably 10 or 12 inches diameter, and it is probably 3" deep—with a curved bottom— the heat was thrown to the center—most like this stand in shape (illustrating) with your lamp underneath; your heat would go to the center.

Right here at the top is a little outlet. I find it gave the same results with less blaze. We would run until noon, and then at the noon hour I would put in more water, and it would be ready for business about the time we are through dinner, and costs about four cents a day for oil to run the stove.

Mr. Cavanagh—How much honey did you extract in that time?

Mr. France—Three to five thousand pounds a day.

Mr. Bull—The quantity of water will decide upon the opening in the knife, and that varies. I have a hole in my knife that is large, and I have to use lots of water. You want a hole that is not too large nor too small.

Pres. Kannenberg—I think we should have a report of the results from the Committee that has been appointed. Is the Committee ready to report?

Mr. Cavanagh—Who is Chairman of the Committee?

Pres. Kannenberg—Mr. Pyles.

Mr. Pyles—Mr. President: The Committee met before the meeting was called to order, and talked the matter over to the best of their ability. In all of the papers we have of the Bee-Keepers' Review there is no account of the Constitution of the National Bee-Keepers' Association.

Therefore, I don't see how we can make an amendment to that Constitution without knowing what the Constitution provides for.

I am very doubtful whether there has ever been any Constitution of the National Bee-Keepers published in the Bee-Keepers' Review; at least I don't remember ever seeing it in the Bee-Keepers' Review.

I am at a loss myself to know what course to pursue. I might have an idea about it but whether that would be the proper thing I don't know. Sometimes Mr. Cavanagh suggests that I must not go too fast—"Make haste, slowly," they say. So I hardly know that I have any report to make unless one of the other members of the Committee have something to offer.

Mr. Bodenschatz—I think the Constitution was in the last report that the National sent out. I am pretty sure of that.

A member—1911 report.

Mr. Dadant—The new Constitution was in the last report—1911. If the Committee have no report to make, we ought to have several resolutions passed. We usually pass resolutions thanking the Management of the Great Northern for the use of this Hall. They give us this hall, free of charge every year. It is very kind of them I am sure because it is a very good place to meet.

I would suggest that such a resolution be passed.

Pres. Kannenberg—We have a Committee on resolutions who will look after that.

Mr. Dadant—The Committee on resolutions—Messrs. Pyles, Bloom and Stanley.

Mr. Pyles—If the membership feel this matter ought to be settled, as to the Constitution, and can figure out what can be done, we will accept all the advice that may come along that will seem feasible. The question with us is—the procedure.

Mr. Dadant—I should like to suggest that during the noon hour the members consult Mr. Pyles, Mr. France and Mr. Cavanagh who are on that Committee, and give them whatever advice they can or whatever they can suggest. We ought to bring that to some sort of a focus this afternoon.

Now another matter of importance that probably ought to be brought before the Convention—We have got the question up whether we shall join the National and State Associations in a body or not. The State Association, you know, pays for our stenographer, pays our postage and printing, and furnishes a report every year.

The National Association furnishes the Review and membership in the National. I would like to know what the pleasure of the Association is.

Mr. Cavanagh—I move that we join the National and the State Associations in a body as has been the custom.

Mr. Pyles—I am in favor of joining the State and the Northwestern and am not in favor of joining the National.

Pres. Kannenberg—Any other remarks?

Mr. Wheeler—I feel, Mr. Chairman, that if we ever make a move it is the time to make it NOW. It seems to me if we keep still nothing will be done. I am not in favor of joining the National unless the Constitution is amended.

Pres. Kannenberg—The trouble is, we have not the Constitution at hand, so we do not know just what to do; that is where we are handicapped.

Mr. Cavanagh—There is no use in our withdrawing from the National, because things have been mismanaged, and as some of us seem to feel, that something has been put over, because if we withdraw from the National we would lose our chance of representation. Nothing would be gained by doing that.

That is too much on the order of—"I won't play in your backyard because I don't like you." The thing for us to do is to stay by the National. Because some members of the National have not done right, it is no reason why we should throw the organization down. Get in the game and let them know we are here.

Mr. Bruner—If we join the State Association I guess that is all that is necessary; if we are members of the State, we are members of the National, are we not?

Mr. Dadant—No, sir, not unless we join it. Our dues are $1.50 and we pay $1.00 and join the National and fifty cents for joining the State. Joining the State does not make us a members of the National. The State Association does not have to join the National; the State Association does not join in a body as I understand it, unless they so desire.

Mr. Pyles—As it appeals to me in this stage of the game, I am as ready to fight as anybody, but at this stage of the game a great many of us paid our dues, $1.50 already, which entitled us to membership in the Chicago and Northwestern, the State and the National. We can either join in a body, the State and National, or join the State in a body and we are out $1.50—and we might be able to do a little good in staying with the National Association another year, and in case they do not do anything I am willing to put up a fight if I am living, and I will bitterly oppose joining the National Association one year from now unless there is something done.

If they cannot make good in another year, there is no use in going ahead and supporting such a constitution.

If they can make good, we will give them our support.

We do not want things run as they have been in the National. We are out our money now, and I believe it would be advisable to join the National in a body.

Pres. Kannenberg—I think we could not do much now anyhow; we might as well stay another year and see what we can accomplish in another year.

Mr. Wheeler—Are we going to send a delegate to the National this year?

Pres. Kannenberg—We will have to elect a delegate or we will not have representation.

Mr. Wheeler—Do we pay their expenses?

Pres. Kannenberg—We have not so far; our brother Cavanagh has paid it out of his own pocket because the National have no money.

Mr. Wheeler—In electing delegates we could instruct them what to do.

Mr. Dadant—If we send a delegate to the National Convention I think we ought to pay his way. It is out of the question for us to do it out of the Treasury. $1.00 goes to the National and 50c to the State, and we get $1.50 for each member—so you see with the receipt of $1.50 and $1.50 paid out—what is left is for the Northwestern, and if the State didn't pay our postage and printing and stenographer, we could not do business, but if we elect a delegate we ought to by all means chip in if necessary, or raise our dues, or do something in order to pay his expenses.

We cannot expect a man to go and represent and pay his own expenses.

Mr. Cavanagh—I think we will have to get this down to something of a tangible business basis, as a business proposition, before we can decide anything.

A good many people here confuse the National Association with the Bee-Keepers' Review.

The Bee-Keepers' Review is a piece of property belonging to the National Bee-Keepers' Association. If we have a piece of property on our hands that is a Jonah, it is a business proposition to dispose of it to the best possible advantage, or to take it and make it worth money.

We have a chance for representation in the National Association, just as good a chance as anybody to go down there and influence the Directors. We can talk to them; this is a free country. I don't think there is anything out of the way in talking the thing over outside of the meeting. That is what we are there for—for the best interests of the National Association and this Convention.

The man who goes down there will naturally work for this Convention, and the idea of withdrawing from the National because they have bought something this Association does not want, is not a good one.

We can throw the National down, and how will that look now, to have no National Bee-Keepers' Association?

A good many of the members here have given of their time and money to build up the National. We would be a nice looking lot to spoil the National. Let us not spoil something that we have got.

Supposing the National did buy something that we don't want, that has nothing to do with the condition we are up against now.

We have a piece of property now, whether we bought it on an economic basis, or whether we made a good deal or not is not a question today.

The question is—What to do with

that piece of property, whether we are going to make it worth the money if it is worth it, or whether we are going to sell it to the National.

It would be a good deal harder to build up a new National Association after this one is done for.

I thing we should go carefully about turning against the National. The National has nothing to do with the Bee-Keepers' Review. That is a piece of property—that is a piece of our property; if we don't want it let us do something with it.

Pres. Kannenberg—I think the only thing is to vote for the National, and then let the delegates fight out the Bee-Keepers' Review proposition, and throw it out if you don't want it, and let the Manager who has the mortgage take the Review back and run it for himself and take it off the National.

Any other remarks as to whether we join the State and National? All in favor that we join the State and National Bee-Keepers' Association in a body, signify it by saying aye—contrary, no.

Unanimously carried.

Mr. Simmons—I believe it would be a good plan to call for a rising vote on that.

Mr. Wheeler—Mr. Chairman, I object to that. I didn't vote against that for any purpose only to show protest. I thought it looked like a kind of weak thing in a set of fellows to stand here and vote to go in and not one raise a vote of protest.

Pres. Kannenberg—I think when we elect our representative delegate he can voice our opinion.

Mr. Bruner—We are going in to the National Association to have an opportunity to tell those fellows what we think of it. Keeping out of the Association will not do it.

Pres. Kannenberg—We will adjourn until 1:30 p. m.

Convention convened at 2 p. m., the President in the Chair.

Pres. Kannenberg—We will proceed to further business.

Mr. Dadant—Mr. Pyles will give us a talk on Sectional Hives and their Advantages.

Mr. Pyles—Mr. President, there have been a good many papers already read and a number of speeches, and some of them pretty lengthy, so I shall hardly take up very much of your time in a discussion of this subject.

Some of you are aware, however, that Mr. Kildow and I perhaps are the only two bee-keepers keeping bees to any extent in the State of Illinois who are using the sectional hive. Mr. Dadant, knowing this, asked me to prepare a short talk on the Use of the Sectional Hive, their Advantages, etc.

First we shall have to take up the matter of the cost of construction.

I said yesterday, or last ninght, that I believed every man should take off his hat to Dr. Miller in the production of a crop of comb honey, and I still say so.

And I think that perhaps everybody should take off their hat to Langstroth for the invention, if you may take it that way, of the modern hive; but I would not give very much for a man who didn't think he could make some improvement on what Dr. Miller could do, or what Mr. Langstroth did do. However I believe in a majority of cases, and perhaps in this one thing in particular, we might have done just as well and may be better if we had stood by Langstroth in what he did.

With the use of the larger hive we have one trouble to contend with, that is, in the production of Comb Honey.

In the use of the really larger hive we have too much room for honey storage in the brood nest; there is too much of a tendency to crowd the queen out of commission and put the honey down below. With the Langstroth hive it is necessary to make use in the super of a sectional holder with thick end bars in the use of the 4x5 sections.

Most of you will know, by coming in to competition with other men in the production of honey, in the State Fairs, and so on, that the 4x5 makes a much nicer and larger looking section than the 4 1-4x4 1-4. There may not be any more honey, but it is a little nicer in the show ring, and it is also nicer upon the counter for sale.

Consequently in looking over this matter, Mr. Kildow and I thrashed it all out, and we decided to build a sectional hive, so in case we had a swarm of bees we could hive the swarm on one section of the brood nest and pile on super room sufficient to give the colony plenty of room to work and force a larger part of the white honey up into

the sections and have very little of the white honey placed in the brood nest.

We decided also that it would be advisable to build a super and a brood nest so that the brood frame or extracting frame would fit also in the super for the production of comb honey.

We didn't care to use the section holder, so we just used a section slat at the bottom; built the hive 16 inches long inside measure; 13 3-4 inches wide, inside measure, and 5 3-4 inches deep—making room for 1-4 inch bee escape underneath dimensions with 16 inches to go on.

For this hive we claim we can contract or expand the brood nest. If we wish to have our bees crowded on to a small brood nest we have the same width of brood next and consequently the sections are right over the brood.

That is what we claim for it, and we are able and willing to demonstrate this matter by stating that our honey this year was 75 per cent No. 1; about 10 per cent of it No. 2, with 15 per cent fancy.

I know a man producing honey, using the Langstroth Hive, in Peoria, who told me he had 75 per cent of his honey No. 2. Perhaps that man was to blame as much as the hive in that case; at least I think so.

We place extracting comb on outside of the super with sections in the center. We relieve the tendency at the beginning of honey harvest, when the bees have a tendency to crowd the brood nest they fill outside combs first, and our sections are just as well filled as in the center of super.

Another thing: Is the case of manipulation; the cost of construction is much less; we have no waste places—just a plain frame made with 3-8 inch top bar, 1-4 bottom bar; 5-16 inch end bar—no waste space, with loose hanging frame.

No one has a patent on this. We don't have to buy our hives of the hive manufacturer—and perhaps Mr. Kildow and I, if we had our way, he would have to go out of business. It is very satisfactory to us, and we are the ones to be satisfied.

With this manipulation—instead of handling bees by frame we handle them by sections in this brood nest.

In the beginning of the season most of our hives are on two sections.

A little larger comb surface on two sections of this brood nest than on the Langstroth hive and the bees have the advantage in wintering. They can go back and forth through the center of the brood nest and do not have to go above or below the frame for the purpose of securing feed, but go back and forth across through the center of the brood nest.

As the season progresses we usually give them one or more sections of this brood nest, making three or four sections of one, and four of them would be equal to two 10 frame Langstroth hive or a little more.

As we come along toward honey harvest we can contract that as honey comes in.

Another thing: We had to contend with, with the larger hive, was that fringe of honey that keeps getting around the top bar that gets larger and larger until the queen is crowded out of commission and the bees refuse to go up in the section super.

When we find that condition going on in our hives, all we have to do is to take the top section of the brood nest off and set it down where the bottom was and raise up the hive, so the bees must necessarily carry the honey out of the lower section, and they rush it up above.

If they fill the upper one, we reverse the operation.

In case we are looking for queen cells, all we have to do is to lift up the upper section of the brood nest, and if there are any queen cells started in the hive they will always be between the two hive bodies.

I would not recommend to any one with quite a number of colonies, who is thoroughly established in bee-keeping in the use of the Langstroth or any other hive, to change to this hive. Perhaps in this locality it would be a sad failure, but with us we are well satisfied with results.

A nice thing about it is that when we wish to put on the cover, our hive is complete without the addition of anything else whatever.

Mr. Whitcomb—In contracting the brood chamber about the time the harvest begins, what is the tendency towards swarming with your kind of hive; is it any greater than with the use of the Langstroth hive?

Mr. Pyles—Not in the contraction of the brood nest.

Understand the contraction always will have a tendency to force swarming unless you supply them with some empty comb. You have got to take away more or less brood and give them empty space in order to prevent swarming in this plan as well as any other.

Mr. Whitcomb—I have heard some object to that kind of hive because they said it had a tendency to increase the tendency of swarming during harvest time; I know nothing about it myself, at all.

Mr. Pyles—In the contraction of the brood nest either this way or down this way (illustrating), it will have a tendency to bring on swarming unless you have got them started working in the supers above and keep giving them plenty of room, and sometimes there are other heroic measures.

Understand, from a comb honey producer's standpoint, swarming is a problem at all times and under all circumstances unless you give them sufficient room to work in the brood nest so that they are not forced above.

We cannot see any more of a tendency to swarm in this hive than any other.

A member—Do you ever have to use queen excluders?

Mr. Pyles—By reversing—putting the upper one below and raising up our hive from the bottom so that the bees are forced to carry this honey up, we can cut down swarming.

This would perhaps not appeal to the Extracted Honey Producer so much.

A member—I would like to ask if you have any trouble with the queen laying in sections?

Mr. Pyles—Not any more than in the Langstroth or deeper frame.

A member—We have what is known as the Roberts Hive.

It is a hive I think about 10½ in. or 11 in. deep, with 12½ or 13 in. in length, something of that kind—deep frame, and I have had sections with brood in where I didn't use the fence.

Mr. Kildow—We have both style hives. I can't see any difference in the swarming tendency, one with the other.

Another thing: The queen laying in sections? I think I only had one super this summer where the queen laid in a section of the hive, and that was possibly in a half dozen sections; so we are not bothered very much with the queen going above sections.

Pres. Kannenberg—Unless she is crowded down in the brood frame I suppose that is the reason she would be in the sections.

J. W. Lang—I have found in my yard if the queen has not got room to lay drone eggs, she will crowd up in top and lay drone eggs. You give your brood chamber full foundations there will not be much space there for the drone and they will be more liable to crowd them up into the super.

Pres. Kannenberg—I have found it the same way.

Mr. Kildow—Nine times out of ten, when I have found brood in the sections it has been, invariably, drone brood.

Mr. Pyles—I find in hauling supers eight or nine miles, as I often do, that you don't want any full sheets of foundation to haul eight or nine miles, especially in warm weather, so we use sometimes two or three inch starter.

Mr. Dadant—We have another talk—by Mr. F. B. Cavanagh—on the Auto Truck and its Advantages.

I thing Mr. Cavanagh told us last year he used an auto truck in his out apiary work.

The Auto Truck and Its Advantages.

F. B. Cavanagh.

Fellow Members of the Northwestern Convention:

You may think that I am kind of a peculiar fellow in giving these talks, in that I make absolutely no preparation when I come and talk.

I am occasionally asked to give little talks before the High School, and I give these without any preparation.

There are two reasons for this; one reason is, I do not memorize—and another is that a man who has been experimenting along one line has made a preparation in relating actual experience.

I think a talk like Mr. France gave (if I could make one as good I would like it) is more interesting and better and more informal, and the members feel that they can make interruptions at any time and ask questions, more so than they would if a paper were being read that had been carefully prepared and worked out to an exact degree.

In this talk my only object would be, of course, to give you something in-

teresting and of value in regard to the use of the motor truck.

I have had lots of experience with motor trucks.

At any time, if there is anything that I have overlooked that will be of interest to you folks, just stop me and feel free to discuss the matter, and in that way we will find the subject more interesting.

The motor truck, in out apiary work if of great advantage, particularly in the matter of saving time.

We are enabled, by using the motor truck, to reach a series of out apiaries without the fatigue of driving horses to and from a distance of anywhere from ten to twenty-five or thirty-five miles a day.

To go this distance in a day, using a driving horse and wagon would be impractical.

My idea in using a truck, primarily, was for migratory bee-keeping. My location is peculiar; in fact we have a heavy fall flow, very little early fall.

Clover is uncertain in its yield, when there is clover, which there is not very much of—consequently in order to obtain a clover flow at all, I must move my bees fifty, seventy-five or 100 miles away from home, and also move back in the fall of the year if I obtain a fall flow—which means a move in the spring and a move in the month of July.

Obviously it is impractical to use horses in moving bees that distance at least.

Now I wish, first, to take up before I go into the use of the motor truck—the mechanical end of motor trucks in general.

The buying of a motor truck is a question, of course, which has to be decided acocrding to a man's pocket book, and somewhat according to the conditions of the road he has to work with; also, whether he is of a mechanical turn of mind.

I doubt very much if it would pay a great many people who have no mechanical ability to bother with a truck. They may have more trouble with it than the truck is worth—more trouble than the truck would bring to them satisfaction or financial return, without securing a driver and keeping him to run the truck, all the year round.

As for myself, I am a mechanical engineer by education, as some of you know, and a bee-keeper by profession. Mechanical engineering now is largely a matter of pleasure to me, and some profit in the running of the machinery I have.

When I bought my truck it was an old type, one of the early types. It had good springs on it, good wheels, a good frame and a motor that was not very much good, and transmission not very good.

We wore out the transmission.

This spring finding the two cylinder motor inadequate I took the two cylinder motor out and put in a four cylinder motor, about 40 H. P.; we installed it in the truck, and then later in the season we discarded the old transmission; put new sprockets in the rear and forward, and bought transmissions that were bought for a three to five ton truck.

My wife wanted to know if that transmission was not so heavy it would hurt the engine, but of course it does not work out that way.

We have a variety of road conditions in our country—heavy sand and quick sands, and we have to get in and out of our bee yard, and sometimes we have to cut into the mud six inches deep; and this takes considerable power.

It is necessary to have power to transmit it to the rear wheel.

I have three speed transmission. At low speed it runs the truck with motor running 100 revolutions a minute. It runs steady with a tremendous power on the rear wheels; that is an emergency speed. The intermediate speed on the truck will run it about as fast as an ordinary farm horse would trot if we let the horse take his time; and the high speed, 15 miles an hour. This is not very fast, but if a man is a truck man he will keep the wheels turning and keep the machine under motion and he will make a great many miles a day.

It is impractical to run more than 15 miles an hour.

It is best to be guided in the use of motor trucks by what has been worked out by scientific men who know the motor truck business.

If we want to run 25 or 30 miles an hour we must have pneumatic tires on the machine and they will have to be tremendous tires in order to stand the strain.

It does not pay to overload tires, neither the solid nor the pneumatic; but

it is worse to overload the solid. Once rubber is compressed beyond its ability to resume its original shape, it never resumes it again and the tire is practically ruined, manufacturers tell us.

So far a light truck or a speed truck, the tires must be either pneumatic or solid, but for heavy truck you must have the solid tires, and slow speed.

I would not advise every one to attempt, like I did, to build a truck.

I value my truck at $1,000. It is reliable. It will do my work and carry two tons, and I can depend upon it. I know when I start with that truck I am going to get there with it—but for the average person who is not so much a mechanic perhaps as one who has studied it, it would be better to buy a new machine rather than take the chances of buying something that is not right.

A great many second hand trucks may be all worn out and torn to pieces, and they are a constant source of anxiety and need much repair and are a constant expense.

As one man remarked to me the other day—"the only difference between buying a new and an old one is, you buy an old truck and pay for it on the installment plan, and the new truck you pay for it on the installment plan while you are wearing it out."

If you are buying a truck—don't buy something worn out. The only way to tell, is to tear it down and go through it unless you buy it from some one who will give you the accurate history of that truck.

It would not pay every one to use a truck for apiary work unless you have long hauls.

Uses of Truck in Apiary Work.

As to the uses of the truck in apiary work: There are two systems in the general handling of apiaries with the motor truck.

One is to do as some of the bigger producers are doing. Haul the honey home and have it extracted, and haul the combs back and place on the hives.

This necessarily deprives the bees a short time of the comb.

The other method is to have extracting power mounted on the truck. This requires extra long chassis on the truck. I lengthened my truck three feet. My deck is now 14½ feet long and 6½ feet wide.

You people understand the load itself should not be 6½ feet wide; the edge of the load should not be beyond the axle, but we use an extra deck in our extracting work.

This is small enough room as it is; the reason for lengthening that was to have a larger honey house on wheels.

We have our extractor mounted on the deck of the truck—carry our Steam capping knives, etc., on it and have a hole cut in the deck of the truck—the honey runs through into a strainer, and is thrown off into 60 lb. square cans.

When we get through with a day's work, or get through at the yard—we do not always finish at the yard in a day—we load the honey on the truck, if we don't have over 3,000 lbs. of it. If we do, we have to store some of it some place else.

We haul it home. In a great many apiaries there is no honey house at the yard and we depend on the truck for our honey house.

The truck is enclosed with rain proof cover, above, and on the sides are burlap and wire screening, which makes it cool and comfortable to work in the yard.

The robber bees of course are more or less curious to know what this thing is that is coming into their little city, and by the time they have a chance to say "Hail to our City"—we are gone with the spoils.

We have little trouble with robbing; occasionally have to keep the curtains of the truck down.

In the majority of cases we throw the curtains up and work in the open, and the bees don't rob if there is any kind of a honey flow.

The gasoline engine running bothers them a little bit.

When we can, we do our extracting in the open, and we are only there a day.

The capacity of this extracting outside depends on the capacity of the man running it.

I frequently extract 1,000 lbs. of honey in two hours if the boys can pass the honey in to me.

But do not understand for one minute I recommend that as an average speed for a man, because I work as fast as I can.

Three thousand pounds a day we consider a good day's work, to go to the yard, and extract 3,000 lbs.; that is more than the average. 2,000 is what we average, with the truck, to

go to the yard which is anywhere from 5 to 15 miles away:

Extract 2,000 lbs. of honey—put it in cans, put it on the truck, and bring it home.

Mr. Dadant—How many of you?

Mr. Cavanagh—Usually, three of us in the party.

Mr. Cavanagh—If there are any questions you wish to ask I would like to have you ask them.

Mr. Cavanagh—I am not sure that it is more economical to carry the power outfit than to have the power outfit in each yard, but my yards are not established in any particular spot.

I am not sure that I am going to be for any length of time at one place and don't feel like going to the expense of putting a power house at these places when I can carry it home.

We prefer to haul it away as fast as it is extracted, and if it is too far away to run home, we ship it home.

Mr. France—Mr. Cavanagh, in case you should not finish the yard in one day, do you unload your outfit from the truck to run home at evening, or run home with it as it is?

Mr. Cavanagh—We always leave the outfit on the truck. It is some considerable work to establish our outfit on the truck. The engine must be bolted down and made perfectly solid.

I have tried to see which is the best plan, in hauling the engine and the extractor to the yards, but we always manage to consume so much time in starting up in the morning, a half day is gone before we know it in setting our machinery. Maybe we are slow with it—but the way we do when we have it bolted down—when we get there, we are ready for business.

One man puts the strainer tank underneath, and the other man gets the smoker ready and the other fellow lights the gasoline stove and puts the water on to boil, and within half an hour from the time we reach the yard, if everything goes well, we are extracting honey.

Mr. Smith—Would it be advisable to run an extractor with hind wheel of truck?

Mr. Cavanagh—It would not be practical; it would require too heavy a motor. Running a large motor like that, the idea is that it will heat the motor unduly.

The larger the motor, the more extravagant is the gasoline question.

Mr. France—At Mr. Hoffman's outyards, in Minnesota, he has the engine bolted to a plank.

He has a telephone going from the home yards to each outyard, and he wires in advance to have hot water ready at the farm house.

He said to me—"The morning I am due at that yard, I will ask the housewife if she will put on the teakettle and have the water ready, and I furnish the teakettle." She telephones to her and says—"We are going out to your yards today, will you please put on my kettle," and they have boiling water ready there, and in fifteen minutes from the time we land the machine is going."

Pres. Kannenberg—Are there any questions you would like to ask of Mr. Cavanagh?

If not we will have the report of the Auditing Committee on the Treasurer's report.

Mr. Thale—After running over our figures we find that Mr. Dadant was mistaken when he said the Association was in debt to him. He made a mistake in addition of $10.00, and we find that now the Association has in the Treasury for next year, $3.84.

Mr. Dadant—I take the correction.

Pres. Kannenberg—So the Association is better off than we expected.

Pres. Kannenberg—We have some resolutions which the Secretary will read.

Resolutions.

BE IT RESOLVED. That we the members of the Chicago-Northwestern Bee-Keepers' Association in Convention assembled do tender a vote of thanks for the use of the hall so kindly donated by the Management of the Great Northern Hotel.

I. E. PYLES.
ARTHUR STANLEY,
W. B. BLUME.

WHEREAS, This Convention has been impressed by the exhibit of the Thale Regulator Vacuum Bee Feeder and believe that same is a good device for stimulative feeding; therefore, be it

RESOLVED. That the Chicago-Northwestern Bee-Keepers' Association in Convention assembled do heartily endorse the above device as a practical instrument for the bee-keepers at large.

I. E. PYLES.
ARTHUR STANLEY,
W. B. BLUME.

Resolution.

WHEREAS, This Convention has been impressed by the exhibit of the Woodman Combined Section Press and Foundation Fastener and believe that same is

practical and a labor saver for the bee-keepers at large; therefore, be it

RESOLVED, That the Chicago-Northwestern Bee-Keepers' Association in Convention assembled, do heartily endorse the above device as a practical machine for the Bee-Keepers producing comb honey.

I. E. PYLES,
W. B. BLUME.
ARTHUR STANLEY,

Pres. Kannenberg—What is the wish of the Convention as to these resolutions?

Mr. Smith—I move the resolutions be adopted.

Motion seconded and carried.

Mr. Dadant—There is another resolution here, but as it has reference to Mr. France, and he is not in the room, we will read this later.

Pres. Kannenberg—We have a delegate to be elected to the National. I think we might do this now.

Nominations are now open for representation in the National.

Mr. Dadant—Mr. President, before electing a delegate to the National Convention, it seems to me we ought to provide some means of paying his expenses and before we can provide means for paying his expenses, we ought to know where the National is going to be held.

With $3.84 in the Treasury, the Association is not in shape to pay much in the way of railroad fare and other expense.

I would like to hear from the members—Ought we provide for this by way of assessment or contribution?

We ought to be represented in the National and have a voice there. We will be entitled to two votes. Probably with the exception of the Illinois State and the Pennsylvania State, we will have as many votes as anybody there. I think we did last year.

Mr. Kildow—I understand by best authority we have now that the meeting is likely to be at Washington, D. C. or some place in Massachusetts.

That being the case, it would take in the neighborhood of $50.00 to pay the expenses of one delegate. If this Convention can raise the money, all right. It seem that the first thing we ought to do is to find out whether or not we can raise the money.

Mr. Smith—Mr. Chairman, I would like to ask if it has not been the rule of the National Assoociation to pay the expenses of a delegate?

Mr. Dadant—It has been the rule of the National Association to promise to pay the expenses of their Directors, but as I understand it, they had not paid the expenses of their Directors last year, at the meeting, and I am sure that is so because I have it in the report.

If they cannot pay the expenses of their own Directors, it is unreasonable to suppose they will pay the expenses of delegates from the different Associations.

Mr. Smith—We had a director and representative both I believe at the Convention last year, and from the report we got last year I don't believe we got any $50.00 worth of good out of it. May be he did, I don't know.

But I fail to see what we accomplished at all for ourselves or for the National Association. Of course we have a Director of the National, a member of this Association. Can a representative do us enough good that we can afford to raise $50.00 or $60.00 to pay his expenses

Mr. Dadant—Mr. President—Mr. Cavanagh is, I believe a Director of the National, and if the National is supposed to pay the expenses of their Directors, we might elect Mr. Cavanagh as our representative, and we would not need to advance any money, if you can figure it out that way.

About the meeting place of the National—I simply don't know where it is going to be. Mr. Cavanagh says he doesn't know, and he is one of the Directors; but I strongly urge at least electing a representative, and if he can make good, all right, and if we feel like we can help him, all right.

After joining the National for the purpose of expressing what we think about it, it would be too bad if there was no one there to represent us.

As to the amount of good Mr. Cavanagh did us last year, I am sure everybody here listened with great interest as to what went on at that Convention.

If he had not been there, we would have been in the dark as to what transpired at the meeting in Cincinnati.

Mr. Kildow—We have about 35 members. If it will take $50.00, it will cost $1.50 a piece from the members here. Are they going to do it? If the Convention wants to pay that money to send a delegate, I will be with them, but I am opposed to it unless it is the

wish of the majority, and then I will go with them.

Mr. Dadant—I don't believe Mr. Cavanagh is present, nor Mr. Pyles, nor Mr. France; the three on the Resolution Committee are out in the hall now; probably we had better take up the question later, when they come in, and take up something else for the present; they could give us a better idea of it.

Pres. Kannenberg—Then we will leave this question until they appear in this room.

QUESTION: Would it be better to hold the next Convention at the time of the Fat Stock Show or as late as this?

Mr. Dadant—Last year we had considerable trouble over that question, and we decided to hold it during the fat stock show, but I was a little late in starting my work on this movement, and found that the meeting held at Minnesota was exactly the time when we could have ours, and I especially wanted to have Mr. France here as there was a demonstration in his favor last year. I knew that he went to the Minnesota Convention, so I put the meeting off until this date, but I do believe it would pay better to have it at the time of the Show.

A member—I have tried to come to this meeting two or three times before this, but it catches most of the farmers too early.

I believe it would be a pretty good idea to let it go at this time of the year when we are not so busy.

At the time of the fat stock show, a fellow comes up for that purpose; he is pretty busy anyhow, and during the fat stock show he doesn't have time to attend to this meeting.

Mr. Dadant—I would like to have an expression from some of the members.

The reason I did not get this started sooner, we had to get notice in the Bee Journal, and I failed to get it in, in time to catch the November number; December 3 and 4 was too soon after the paper was issued.

Pres. Kannenberg—It would be a good thing to set the time when we want to hold our meetings. Then our Secretary could have everything arranged so we would not have to hustle up like this.

Mr. Bull—How would it be to take a vote on it—one vote for the time of the fat stock show, and one to be held at this time? I make a motion to that effect.

Motion seconded, put and carried.

Mr. Bull—I move we take a rising vote.

Motion seconded and carried.

Pres. Kannenberg—Who ever is in favor of the week of the fat stock show for having the meeting here, might rise.

Mr. Woodman—Don't you think it would be a good idea to leave the time of the meeting to the Executive Committee? Too often other convention days conflict if you set the date a year ahead.

Pres. Kannenberg—Really as the motion is, they are all in favor of the 17th and 18th of December or about that time. We will leave it to the Executive Committee and you will be notified in time.

Mr. Woodman—I make a motion that we leave it with the Executive Committee.

Motion seconded, put and carried.

Question—Will bees ever effectually remove American Foul Brood from combs, and under what conditions? Who has tried Stewart's method?

Pres. Kannenberg—Has any one ever tried the Stewart method?

Mr. Dadant—Mr. Kildow, have you ever tried Stewart's method?

Mr. Kildow—I have never tried it, and I don't believe it can be done. I have been in Mr. Stewart's yard, and he is the one who claims it can be done, but the Spring I was in his yard (a year ago last Spring) he had been using that treatment for several years—and I think the one yard that I visited and looked at especially, was the yard that had 75 colonies I think in the Fall and there were four left in the Spring when I was there, and they were badly diseased.

I don't think he is making a success.

As my experience goes with this American Foul Brood—it is impossible to get it out of the cell unless you tear the cell out. I won't say positively it can't be done, but I believe it can't be done. I have my doubts about its being able to be done, by Mr. Stewart's method or any other.

With European Foul Brood—that is a different thing.

Pres. Kannenberg—I think the only way to cure American Foul Brood is by the McEvoy treatment.

Mr. Kildow—By the McEvoy treatment or some other such treatment; there are several others that are just as good. Mr. Baldridge plan is good.

Mr. Baldridge—My plan is so simple that I think I had better write another article on the subject and explain it. I don't think it is generally understood what my plan is—so I believe I had better write another article and have it published in the Bee Journal.

My plan is so simple that by following it, any one ought to get rid of American foul brood.

The bee escape has very little to do with the matter in my system of treating of foul brood.

Pres. Kannenberg—You had better give us another article in the American Bee Journal.

Mr. Baldridge—I had better write it out. It is much more simple than people think it is. Any one who can examine hives of bees can cure American foul brood.

Mr. Smith—I would like to hear him explain it. If then there is anything about it we don't understand we can ask him. Anything is simple to the man who knows how.

A member—It is the simplicity of anything always that makes it complicated.

Pres. Kannenberg—Will you give us an idea of your system, Mr. Baldridge?

Mr. Baldridge—I will mention some things:

Mr. Baldridge's Treatment of Foul Brood.

Mr. Baldridge—Now I go to a hive that is healthy. You can find in any yard, as a rule, a healthy colony. I take a comb out of that healthy colony, and put that in the empty hive and set that hive in place of the foul brood hive, and turn the foul brood hive around, and that is all there is to it for the time being.

I don't set them side by side. I turn the foul brood hive the other way.

When the bees go out to work, they go back into their own stand on to the hive I give them.

The foul brood hive will raise a queen. When they raise a queen and she is fertile, you can take her out and replace the old queen and move the foul brood hive to some other stand, and raise the bottom of your hive that had the one comb in and they will go in there when they go out to work. You get most of them out. Later on there is something else to be done to free that hive entirely of bees.

I don't use any brood. A friend of mine treated 15 hives this summer that way and he has but one colony of foul brood now. He has 30 colonies of bees and got 235 lbs. of honey to the hive of those that he treated.

Pres Kannenberg—He fills the empty combs with starters?

Mr. Baldridge—Sometimes I put in empty comb but I believe it is better to use foundation than empty combs.

Bee bread may have been stored with the diseased colonies; bee bread is apt to have germs of disease in it because it is mixed with honey, and I would rather use foundation.

Mr. Vashees—I think foundation is the best, too. When I had foul brood I asked Mr. France if I could use fresh combs and I tried it and had foul brood; you could hardly see it.

Mr. Bull—I take the weakest one of the colony that is diseased, or the weakest colonies, according to how many there are, and treat them, shaking those colonies with the McEvoy plan. Pile that brood over that weak colony. I had three colonies once I stacked up brood on like that, and you ought to have seen them pile up honey. I shook them out after three weeks later.

They filled up the super in 3 days chuck full. That is what the brood did that you might otherwise throw away. The colony I put them on could not exist at all.

Mrs. Holmes—I would suggest to brush the bees off from the frames instead of shaking them.

Mr. Bull—The way I handle that is to shake them in the morning. You cannot shake out one-tenth as much as in the evening or middle of the day.

Pres. Kannenberg—Won't the bees suck them full or old comb honey and take them into the other hive?

Mr. Bull—I never have any trouble. In the first place you are shaking them on foundation.

I put super of drone combs on to those hives immediately. That honey never goes to the brood.

You shake them on full sheet of foundation. It will take them perhaps a day or two to draw it. In three or four days of honey flow there will be no honey left in the brood chamber. It will be in the supers.

Resolution.

WHEREAS, The members of the Chicago-Northwestern Bee-Keepers' Association have especially enjoyed the presence of our universal friend, Mr. N. E. France, and

WHEREAS, We wish him to feel that his presence has been a source of great pleasure to all of our members, and

WHEREAS, We all know that Mr. France is one of the very few who have given his untiring efforts in the promotion of our interests with practically no recompense; therefore, be it

RESOLVED, That the Chicago-Northwestern Bee-Keepers' Association in Convention assembled do hereby tender a vote of thanks to friend France and all join in the hope that he will be with us at every one of our future meetings.

I. E. PYLES,
ARTHUR STANLEY,
W. B. BLUME.

Pres. Kannenberg—What does the Convention wish to do with this resolution.

A member—I move that it be expressed as the resolution of the Convention.

Motion seconded and carried.

Mr. France—Mr. President, I would like to make a reply to that, but I hardly know how. Some of you may not have seen the remembrance of this Association of a year ago.

The same way was it with those National Conventions—those social gatherings, if you please. I was surprised by our old friend Mr. Hutchinson, at the National Meeting at Harrisburg, Pa., where he, as Secretary, presented me with this tribute of a gold watch; and a set of silverware to my wife, as a surprise.

A little later when the old National Association was no more, they passed the hat again and a very beautiful leather chair, by surprise, came to me, Mr. C. P. Dadant, was Chairman of the Committee.

Also a part of the fund not being used, the same was sent to my wife that she might buy what she saw fit. I asked her if she would go with me down to the store and buy another leather chair, a duplicate of the one I had given to me. The chair is nearly large enough for two of us, but I said to her, "Let us have comfort" and we bought the second chair.

Those things are what count. As the old song reads, composed some years ago by your first Manager of the National Association—It is friendship that binds us here today.

Let us remember the friendship—pull hand in hand together for mutual benefit and help, and enjoy our meetings while we are here.

Mr. Smith—I want to make a motion: I move that we instruct our delegate to the National Convention to use his best endeavors to have our By-Laws Amended so that it will be impossible for the Directors to expend more than one hundred dollars without referring the matter to the Associations who are members of the National Convention.

Motion seconded.

Mr. Cavanagh—It occurs to me it would be much better for us to vote on this thing and put it as a resolution, and give our man authority to vote in that direction. We have not given him any authority to vote for that—

Pres. Kannenberg—You have all heard the motion—Are there any remarks?

Mr. Cavanagh—The way the motion reads, we prohibit our Directors spending more than a total of $100 for all expenses or anything of any nature whatever during the entire year.

I believe the intent of that motion is that they shall not purchase any piece of property which of itself is more than $100.00. And I think this ought to be corrected in some way so that it reads the way it is intended.

Pres. Kannenberg—I believe Mr. Cavanagh has got that on his resolution.

Mr. Smith—I aimed to get a copy of that resolution.

Mr. Cavanagh—If it is the wish of this Convention, I will read this resolution in regard to limitation of Directors purchases.

Resolution.

Be It Resolved, That an amendment to the Constitution be presented at the next annual meeting of the National Association which will prevent the purchase of other property to exceed $100.00 at any one purchase either by cash or on the installment plan without first submitting the same to a vote of the members of all affiliated Societies represented at said Convention.

Mr. Smith—I move that we accept that as a substitute for the motion I made.

Motion seconded.

Pres. Kannenberg—The resolution reads, "They shall not spend more than $100.00 at one time." Can they spend $100.00 a month?

Mr. Smith—Yes. This Committee has given a good deal of thought to this; my motion was given on the spur of the moment.

Mr. France—The members have got to be notified first before they can spend another $100.00.

A member—As I understand that—they cannot spend more than $100.00 at one time for one purchase; they can make a whole lot of purchases in one year, can't they?

Mr. Smith—We have got to give them that privilege.

Mr. Pyles—As it is getting near the time for Mr. France to take his departure, I move we take a recess for a sufficient length of time to shake hands and bid him good bye.

Mr. Smith—I move you the adoption of the substituted motion.

Motion unanimously adopted.

Mr. France—Before you take your recess, and I will have to leave hurriedly—

Who will be your delegate, and are you going to bear any expense for that party going to that annual meeting?

It is my impression, although the location is not definitely decided as to where the meeting will be, that it will be without question along the extreme Eastern border—Massachusetts, Ontario, Canada, or possibly Washington, D. C.

It means quite an expense to get some one to that meeting and back again. Should any one individual be asked to do that?

Mr. Smith—I would like to say to brother France things that we discussed while he was absent; we came to the conclusion in this discusion that we would follow the example of the United States with their ambassadors—we would get a wealthy man to represent us. We are lucky enough in having as a Director of the National one of our members, who represented us last year, and as the National Association pays the Directors' expenses, if we elect some man that would save us that expense, so we make $50.00, and in this case "We get the Graft" instead of our representative getting it.

Pres. Kannenberg—I believe we had better call for the nomination of a representative to the National before Mr. France leaves.

Mr. Bull—I nominate Mr. F. B. Cavanagh.

Nomination seconded, put and carried.

Mr. Pyles—I move the nominations be closed and Mr. Cavanagh be declared as delegate.

Mr. Cavanagh—I think that you had better pass things around a little bit. I went down there and they run the steam roller right over me, and I was flattened out as thin as tissue paper in about fifteen minutes. I think some one of the other members of this Association would like to take a trip down there.

Pres. Kannenberg—All in favor of brother Cavanagh being elected as representative to the National Bee-Keepers' Association Convention, signify it by saying Aye—contrary No.

Unanimously carried.

Mr. Smith—I don't want any one to think I was offering a criticism; I don't mean to criticise the Committee or anybody else.

Mr. Cavanagh—Before we leave here, I want to say a word as to this Review:

We have discussed this pretty openly and pointedly.

We considered the thing from about this standpoint:

From the fact that the Review is trying to get donations, evidences that they have seen "the handwriting on the wall," so far as the Review is in its present state.

With the death of our Mr. Hutchinson, the Review died.

If we start in now and try and dispose of that Review—try to sell it to somebody—in the first place we have to prove what we have to sell—and we have nothing to sell outside of the value it is to the Bee-Keepers themselves.

Other Journals will not buy it.

The next thing we assumed—the minute we take the thing to dispose of it—sell it—we have taken the matter away from the parties who promoted this thing in the first place, and then we are stuck for the difference between $1,000.00 and what we actually receive for it.

If we interfere—as the Review is—they have a perfect right to say our intervention was the cause of their failure.

So—let the thing alone; let them have a chance to make good—then I think we are free from it and free from any criticism if the Review does

not make good. And if it does—we are glad. We hope they will make good.

I want the thing to go ahead in the best interests of the bee-keeper. Let us give them a year to go ahead and see what can be done. If a foreclosure is made, it will be made on nothing because the Review has no value when it is detached from the National Association.

Let us give them a chance to live. Let us be loyal as subscribers.

It is worth the money—but let us ask for this report, because we want a stenographic report.

I want you to understand the policy we have adopted here, and I want you to understand the way we see it, and I think we will all feel better if we do.

A member—I move that we adjourn for ten minutes.

Motion seconded, put and carried. Meeting adjourned for ten minutes.

Meeting convened, called to order by President.

Mr. Dadant—In order to get a little something before the house—possibly it is a little late to ask this question now—I would like to know how many colonies of bees are represented at this meeting. We know just about how many colonies Mr. France has and can make a note of them. If each member will write on a piece of paper how many colonies he has, we can make an estimate of the number represented at this meeting; it is too bad we did not do this earlier.

Mr. Smith—While this is being done—I would like to make a motion: I move you that all of the discussion of yesterday afternoon concerning the Bee-Keepers' Review be expunged from the minutes, and that this motion does not prevent the stenographer from collecting her fee for taking it.

Motion seconded.

Pres. Kannenberg—It has been moved and seconded that this wrangle we had about the National be expunged from the minutes. Are there any remarks?

Mr. Dadant—Before deciding on that—do you mean all that had to do with the National, or should it be left to somebody to cut out?

Mr. Smith—Leave it to the Secretary.

Mr. Pyles—In substitution for that motion: I would like to make a motion that the Secretary be allowed to act as censor for this meeting and cut out all he thinks is necessary from the report.

Mr. Dadant—That gives me pretty high authority.

Mr. Pyles—You are big enough.

Pres. Kannenberg—All in favor of this substituted motion, signify it by saying—Aye; contrary minded, no.

Motion carried.

Mr. Dadant—There is a total of 5,404 colonies represented here; that is a pretty good showing. Over 5,000 colonies represented!

Mr. Cavanagh—While we are on the subject: A newspaper man was standing outside the door and asked me if I knew any funny stories about bees. My partner told him we didn't; we have lots of people tell us stories they think are funny but we think they are foolish.

Mr. Dadant—Probably the funniest story told is the one about comb honey being manufactured—and if there has anything that has done harm to the bee-keeping industry it was that story of Dr. Wiley which he never did retract publicly.

Mr. Smith—By the way I had an interesting experiment—as to whether bees go to the flower by sight or by scent?

I have an apiary near Jackson Park. I play golf there.

All the white clover was taken off the golf field by a lawn mower. I threw my white golf ball a hundred yards and walked over to it and there was a bee. That bee was attracted by the color—trying to get honey out of that golf ball.

A few days later the mosquito got so bad a great many of the golfers were driven from the field. Others took something and rubbed over their hands to keep the mosquitoes away—and the bees ran out and drove the people away—that proved they were there from scent.

A member—I would like to say something, Mr. Dadant, about that article you mentioned of Dr. Wiley and the manufacture of comb honey.

It would do you good to go around selling comb honey, to find that Dr. Wiley is not the only person who thinks comb honey is manufactured.

Mr. Dadant—Yes, but Dr. Wiley was a man of authority and a scientific man and knew better. He sent this out simply as a scientific pleasantry,

and other people have backed their statement by his.

Mr. Kubick—That is one reason why there will always be a demand for comb honey. The minute they see candied comb honey they denounce it as adulterated; they do not know that pure honey will candy.

The very minute they see extracted honey, candied, "It is pure sugar" they say.

An article in the newspaper I think will help the sale of honey wonderfully, written by an expert in the bees business—or a lecture had at the public schools here in Chicago.

It would pay a man that produced a large amount of honey every year to spend a day occasionally and tender his services to the School Board to give the children a lecture on bees. I think it would do much good to show honey in every stage of production—the bees, the queens and the drones.

Mr. Hawkins—I have had a little experience with the newspapers.

I think it would be a mighty good "ad" for this Convention and Association if in some way or other we could fix up a plan to get a notice in the morning Chicago papers regarding this Convention and what was done here.

You will be surprised the number of people who will read such an article—especially that representative of the number of colonies.

If you want to talk about something that will be of interest to the public, tell about the pounds of honey that would be obtained if each colony produced 200 pounds. I think they would like to read such an advertisement.

Mr. Bull—There are lots of people to whom you talk, if you tell them how much honey you got, they will not believe it. When you tell them the real facts of the matter, they think you are crazy.

Mr. Pyles—I move that the next to the last speaker (Mr. Hawkins) be appointed a committee of one to see that this matter is got to the Chicago papers, and that he get it out himself.

Mr. Kubick—I think another good suggestion is that an announcement be made in the papers a day or two before this Convention convenes, so that a reporter could be here and give you a nice write-up.

A member—about the reporters taking notes of the meeting. We were discussing the advisability of getting a government report of the honey crop. A man came up here and heard the negative side of it, and he put a long article in the paper about what a conservative class of people bee-keepers were; they didn't want anybody in the business but themselves, and they were afraid that some one might learn their secrets.

I think we had better have one of our members write the publication. The reporter will generally put in such a report as you do not want.

Mr. Pyles—We had the same trouble at Springfield one time. A reporter came in there when we had a matter for discussion, and he wrote a long article along that line—that it seemed there was a big lot of money in the bee business and we didn't want anybody else to know anything about it.

The average city editor is not the one to put these things in the newspaper.

Motion seconded, that Mr. Hawkins be appointed as a committee of one to fix up something for the newspapers—and carried.

Mr. Dadant—There will be some one up here I believe pretty soon, if Mr. Hawkins will prepare something and give it to them.

Question—What is the most practical way of shipping comb honey?

A member—Does that mean by express or freight? Does the party asking that want to know how to ship large quantities of comb honey or small quantities? It would make a difference whether it was shipped by the case or by the carload.

Pres. Kannenberg—It means the most practical way—perhaps how to pack it?

Mr. Hawkins—I would like to say something along that line about shipping honey by parcel post.

I have a very particular friend who is a railway mail clerk, and a short time ago I asked him what he thought about the proposition of shipping comb honey by parcel post, and he said it would not be advisable at all until the United States Government had time to investigate the methods of carrying honey by parcel post in foreign countries, and made such provisions as they have there, having these provisions go into effect in this country.

For instance—if you ship a gasoline truck—and a package of comb honey—

they go in the same pack. If the honey goes in first something is doing.

In foreign countries, as he explained it to me, every article of that kind, before it can be accepted for mail, has to be marked "fragile", with a particular stamp given free by the Government, and that article is always carried in a separate carrier while it is enroute in the mail car.

I think the proposition of trying to send honey by parcel post is liable to get us in bad with the Postal Department if we do not wait until they get some other service than that which they have at the present time.

Mr. Cavanagh—I have shipped a little honey by parcel post. It must be put in a container so that if the honey is smashed and running the container will retain it so that it will not get out of the package.

The tin, or whatever holds the liquid must be protected by a box so strong that it cannot be crushed.

Don't put your pails in corrugated paper; put them in a strong wooden box so that the pail cannot be jammed.

Put the comb honey in friction top pails and the pails in boxes.

We are going to go up against the parcel post regulations if you are not careful.

Don't expect your postman to know more about the parcel post system than you do. It is our business to learn all about this.

Our postman accepted some packages which were against the postal regulations, and I saw it and began using wooden boxes; I did not wait for him to tell me.

Mr. Bull—They have got to be hermetically sealed.

Mr. Kubick—It has got to have absorbents around it, so that if the article breaks, there will be the absorbents there to absorb the contents.

Mr. Cavanagh—That is true of small articles and drugs, but I don't believe as to pails of honey, not when it contains 10 or 15 pounds. I have read the regulations, but I don't think that means honey.

Mr. Bull—Under the head of honey, nothing is said about absorbents. It has to be hermetically sealed, packed in a strong box, and securely wrapped.

Mr. Kubick—That "hermetically sealed" would be sufficient to overcome the absorbents.

Mr. Bull—I shipped one 10 lb. can in a box, and it was burst open, and the honey bulged out at the top and leaked.

No matter how strong your box is your cover may not stay on.

I had the same thing happen in sending honey by express.

They threw the box sideways.

Mr. Pyles—It seems we have gotten into a discussion of sending extracted honey by parcel post. The man who asked this question wanted to know of some practical way to ship comb honey, or the most practical way, perhaps.

The most practical way, in a small way, would be to put your comb honey in cases, and then in a crate.

Make your crate so heavy it would require two men to carry it, with handles on.

Put at least eight cases in a crate, and that will make around nearly 200 lbs. weight without your crate. The entire weight—240 lbs., with crate. I believe that was the weight of all I shipped this year. Two men must take hold of the handles to carry that.

Mr. Kubick—Can you ship that by parcel post?

Mr. Pyles—No, the question was not "parcel post" but "shipping".

Mr. Smith—Perhaps it would be a good thing for some of us to know—we who live in Chicago, many of us, have eggs sent in from 40 to 140 miles away, by express. They return those cases for 10 cents. We get them without an egg broken—30 dozen by express. The case for packing the eggs will be returned by the express company for 10 cents—a distance of 140 miles.

These cases he mentions doubtless could be returned for 10 cents or 15 cents for honey.

Mr. Pyles—They can be if you first ship them by express.

Mr. Smith—I have tried it with eggs, 20 times.

Mr. Pyles—Our crates were returned to us for five or six cents by freight.

Question—If Sarah got a bee in her hair would the honey comb?

Mr. Pyles—Somebody would comb I guarantee. You might ask, if she got some honey in her hair would it "bee" comb?

Question—Does any one have trouble with moth or eggs in comb honey?

Mr. Smith—I had an experience I think which is not common. I used

drone comb for foundation. I used a queen excluder. I had two or three hundred drones hatch out in both sections, which settled the question to my mind as to whether bees would carry or move eggs.

The queen was larger than the average size queen—Carolian queen—rather larger than the average queen.

I had an ordinary size queen excluder; I think there were fully 200 drones hatched out. I saw them when they were eggs and watched them until they were hatched above the excluder in the sections.

A member—I had that same thing happen to me with extracting hive. Had queen excluder between two of them.

The biggest one I had got through the queen excluder; I put her back again down in the bottom. She was not satisfied down there; in three or four days she went back again.

I know very well the queen was up in there because I saw her. She was a big queen at that. There had been some drone comb in there and she had filled that full, but she had no room for drone eggs in the bottom. I think that forced her through to get that drone comb.

Mr. Hawkins—Speaking about moths. Almost every fall I save as many full combs of honey as I can get hold of to strengthen nuclei formed early in the year. And I find the moth will get into them, and to my way of thinking, the best method of prevention is to put them in the hive with as near tight bottom and top as you can get. On the inside of the cover, tack a little wad of cotton about a couple or three inches square, and saturate that thoroughly with about a 40 per cent solution of formaldehyde. They will work in full combs of honey and have destroyed it for me.

I could go home now and get you two or three I have up stairs fully eaten through the combs until the honey was in the bottom of the hive. I think formaldehyde is better than carbon bi-suplhide or some other disinfectant, because I believe when the gas is formed instead of being a solution it stays longer in the hive. Carbon bi-sulphide will leak out quicker than formaldehyde. Formaldehyde will last longer and do better work.

We might add to that: I had a hive full of combs of that sort up in this workroom, that is bee tight because I have stored honey in there—and yet that hive with those frames of honey in it became full of moths; they got in there in some way.

Mr. Pyles—Carried it in when the honey was carried in; the eggs were there.

Mr. Smith—I had comb honey eaten up this fall; that had not been in the house over a year before the larvae attacked it.

I thought it was moths that had gotten into the house, the same that eats clothing, perhaps.

Mr. Pyles—The moth that eats clothing never attacks wax. It is an entirely different moth; it is of the miller type, and the small ones they say don't do mischief but they just merely eat the cappings off the comb honey. They don't get much. The reason they call them small ones in this country is because they only eat the cappings off from the comb honey, and you put some on one that has got more or less pollen in it and you find that a big fat one.

The reason the small one is small is because he has not got pollen to feed upon, and he does not get any size and will die in time; they usually die before they get any size. Put in comb full of pollen and see how quickly he will get to be a great big fellow.

Mr. Kildow—There are two kinds of moths as I understand it; the small one and the large one. One will work on comb with plenty of pollen and still not be big.

Mr. Dadant—The text books will tell us about that; I don't know.

Mr. Cavanagh—I would say, there are two.

Mr. Kildow—The small one don't get more than one-fourth inch long; sometimes three-eighths.

Mr. Pyles—I have seen small wax moths, but they have always been large fellows where there was plenty of pollen to live upon, and always small when it is nothing more than pure wax.

I have been noticing this for quite a long while and think something should be put in the Bee Journals about it.

I believe it was Dr. Miller who said that the small ones, he had noticed, all got big fellows when they got pollen to feed upon.

Question—Do Italians fight moth better than the black bees?

Mr. Pyles—Yes, plainly.

Mr. Dadant—Is there any reason why they do?

Mr. Pyles—I think the Secretary heard me call his father's attention to the reason why the Italian bee was a better fighter.

The reason is because he has, through hundreds and thousands of years been raised in Italy, in a warm country, where eternal vigilance is the watch-word—and the bee who didn't fight wax worms, he would be eaten up before spring with the wax worm. Only those that were good fighters lived through.

The Italian bees have got this in their nature; they have fought it for years and years. The black bee is a native of the colder country and has not had the thousands of years of fighting that the Italian bee has.

Mr. Cavanagh—I notice Mr. Pyle is repeatedly using the pronoun "he."

Mr. Pyles—I have perhaps repeatedly used this word, and I notice our learned friend repeatedly keeps away from saying "she" when he speaks.

Pres. Kannenberg—I suppose one is as correct as the other.

Question—Is the new National Bee-Keepers' Association doing more for its members than the old?

Mr. Cavanagh—Doing more, but not as much good for us.

Mr. Smith—I move that question be laid on the table.

Pres. Kannenberg—Have we any more questions for answer?

Mr. Pyles—I think it is time to adjourn. I move that we adjourn.

Pres. Kannenberg—As far as we have gone, I believe we have had a good time. I wish to thank the Convention—you have honored me by putting me in as President, and I thank you for the honor.

We will now adjourn until next year—notice to be given of the time and place of meeting.

The meeting stands adjourned.

At 4 p. m. the Convention adjourned to meet at the call of the Execuitve Committee.

TAKE NOTICE!

To this point our report has been in print just five weeks—ready to bind—awaiting the matter from the National which follows.

The Secretary has been compelled to answer numerous inquiries as to why the report was not out. Therefore we offer as an apology that the Secretary of the National has been confined to his bed—and excusable.

DR. BURTON N. GATES, President,
Amherst, Mass.

GEO. W. WILLIAMS, Secretary,
Redkey, Ind.

MINUTES OF THE
National Bee-Keepers' Association

In Convention Assembled at the Planters' Hotel, St. Louis, Missouri, U. S. A.,

FEBRUARY 17, 18, 19, 1914.

Note—In the absence of Secretary E. B. Tyrrell, President Gates appointed Wesley Foster Secretary Pro Tem.

MORNING SESSION, TUESDAY, FEBRUARY 17th, 9:30 A. M.

President Burton N. Gates called the convention to order promptly at 9:30 and announced the following committee appointments:

RESOLUTIONS: Dr. G. Bohrer, (Kansas); W. B. Moore, (Illinois); Dr. E. F. Phillips, (Pennsylvania).

AUDITING: Frank G. Pellett, (Iowa); R. A. Holekamp, (Missouri); Wesley Foster, (N. California).

POLICY & EXTENSION: Dr. J. S. Ward, (Tennessee); D. C. Polhemus, (Colorado); C. H. Baldwin, (Indiana). Note—In absence of Mr. Baldwin, Mr. G. W. Williams, of Indiana, served.

CONSTITUTION: Wesley Foster, (N. California); W. B. Moore, (Illinois); J. H. Stoneman, (Idaho).

It was moved and carried that the President appoint a Credentials Committee. The following appointments were made:

CREDENTIALS: C. P. Dadant, (Illinois); J. M. Buchanan, (Tennessee); Dr. G. Bohrer, (Kansas).

President Gates declared a recess till 10:15 a. m., to give the Credentials Committee an opportunity to pass upon Delegates' Credentials and prepare their report.

President Gates called the Convention to order at 10:15 a. m., and called upon Mr. C. P. Dadant, Chairman of the Credentials Committee, who reported as follows:

Delegate	Affiliated Association	Votes	Member ship
W. B. Moore	Illinois	4	190
B. N. Gates	Hampshire H. F. Bee-Keepers' Ass'n	1	49
B. N. Gates	Worcester County	2	80
R. B. Daly	Adirondak, Absent)	1	24
C. H. Baldwin	Indiana, (Absent) G. W. Williams (Alternate)	3	135
E. J. Baxter	Chicago N. W.	1	38
Wesley Foster	Northern California	1	50
Dr. G. Bohrer	Kansas	1	25
R. A. Holekamp	Missouri	2	85
J. H. Stoneman	Idaho	4	158
F. C. Pellett	Iowa	1	50
E. D. Townsend	Michigan	4	160
E. F. Phillips	Pennsylvania	6	251
D. C. Polhemus	Colorado	2	79
J. S. Ward	Tennessee	3	110

The report of the Credentials Committee was adopted by the Convention. The delegates were then recognized by the Convention, each delegate rising as his name was called.

An invitation from The Anheuser-Busch Brewing Ass'n to visit their brewery was read and arrangements fo those wishing to visit the plant were referred to Mr. Holekamp.

An invitation from Blanke and Hauck Mfg. Co., also, was read inviting all bee-keepers attending to visit their place of business.

By general consent it was left with Mr. R. A. Holekamp to arrange for a photographer to take a group picture of the Convention.

A motion was carried to hear the reports of the officers of the Association and President Gates gave his annual report and address. The president's address contained suggestions as to the change in Constitution and a copy was upon motion being carried referred to the Committee on Constitution.

The report of Vice-President Surface was read. Prof. Surface not being present on account of sickness in his family, his report was accepted and filed with the proceedings.

Treasurer Dadant gave the Treasurer's report which was referred to the Auditing Committee.

Mr. C. P. Dadant, Chairman of the Fund Committee, appointed at the 1913 Convention in Cincinnati to purchase a suitable present for retiring General-Manager France, reported the purchase of a chair, inscribed with a suitable plate, which had been sent to Mr. France as a token of the love felt for him by the members of the National Bee-Keepers' Association.

The report was referred to the Auditing Committee, with the understanding that the names of contributors be not published in the proceedings.

Mr. E. D. Townsend, as editor of The Review, gave his report, which was referred to the Auditing Committee.

The suggestions in Mr. Townsend's paper on buying agents for the National was referred to the Committee on Policy and Extension.

The Committee on Standardization of Color of Honey, appointed at the Cincinnati Convention in 1913, reported through Dr. E. F. Philips, Chairman, no progress made as yet and report delayed on account of unforeseen difficulties.

Upon the termination of some discussion on color of honey, by Dr. Bohrer and others, the Convention adjourned till the Afternoon Session.

Adjournment at 11:45 a. m.

TUESDAY AFTERNOON SESSION, 1 P. M., FEBRUARY 17, 1914.

The Convention was called to order at 1 p. m., by President Gates. Chairman C. P. Dadant of the Credentials

Committee made a further report of delegates as follows:

Delegate	Ass'n	Votes	Membership
D. H. Morris, Ohio.....		2	59
E. G. Carr, New Jersey		2	65

The report was received and for the benefit of bee-keepers coming in late the roll call of delegates was again read, each delegate rising for recognition as his name was called.

Mr. Frank C. Pellett, Chairman of Auditing Committee, made the following report:

We, your Auditing Committee, report that we have examined the treasurer's report and find it correct. We recommend that 68 cents be charged to profit and loss on the editor's report to make books balance.

Signed, FRANK C. PELLETT,
Chairman,

The report of the Auditing Committee was received and filed.

Prof. Morley Pettit, of the Ontario Agricultural College, Guelph, Ontario, Canada, spoke on Agricultural Education.

A few points he emphasized were these:

European foul brood is a blessing in disguise—it makes bee-keepers of those who have to combat it.

Every man should be his own inspector.

The distribution and marketing of honey very important now.

Education for distribution is necessary.

Co-operative marketing must begin locally.

Advertising necessary.

House to house canvassing is effective.

Displays in stores important.

Advertising a branded product would aid distribution and sales.

Mr. Frank C. Pellett spoke on Developing the Bee-Keeping Industry of Iowa. Securing foul brood legislation and the need for a publicity campaign were emphasized in his talk. In conclusion he extended the invitation of the Iowa Bee-Keepers' Association and the Des Moines Commercial Club to the National Bee-Keepers' Association to meet in Des Moines in 1915.

In the general discussion which followed Mr. Pellett's address Mr. Geo. W. Williams, of Indiana, explained the working of the Indiana honey day and how it stimulated consumption.

A motion was made and carried to refer all papers read, dealing with policies of the National Association, to the Committee on Policy and Extension.

Mr. W. J. Lewis, of St. Louis, spoke on Publicity.

Mr. W. B. Moore read Mr. A. C. Miller's article entitled, "Why". In the general discussion following, Mr. Moore suggested the per capita tax for publicity purposes. Prof. Pettit said the government of Canada aids co-operation in selling.

In the discussion on honey crop reports it was decided to have a special committee on honey crop reports to co-operate with the crop reporting bureau of the Department of Agriculture.

President Gates appointed the following Special Committee:

Honey Crop Reports.

Frank C. Pellett, Chairman.
J. H. Stoneman,
Wesley Foster.

Adjournment.

EVENING SESSION, FEBRUARY 17, 1914, 7 P. M.

President Gates called the Convention to order.

The invitation of the Anheuser-Busch Brewing Ass'n was discussed and the matter was carried over for consideration later.

The Committee on Policy and Extension reported through Chairman J. S. Ward as follows:

Your Committee on Policy and Extension beg leave to submit the following tentative report. First, we find from the expressions already given during the morning and afternoon sessions that a number of changes in the policy of the Association is desired and we feel sure we cannot give all these matters due consideration and therefore ask for assistance in the appointing of some two or three sub-committees to consider some of the special questions as follows:

1st. A Committee on Policy of the Review continuing the work of Purchase and Sales.

2d. A standing Committee on a code of Methods and Policies of the Association.

3d. A Publicity Committee. (Publication Committee.)

Reports of these committees may be discussed and acted upon by the delegates in session or given to your present Committee on Policy and Extension to be incorporated in the final report.

Signed, J. S. WARD,
Chairman.

After considerable discussion of the policies of the Association a motion was made and carried for the appointment of committees of three as suggested by the Committee on Policy and Extension.

The resolution laid before the Policy and Extension Committee was referred to the Program Committee. (The Secretary pro tem does not know of a committee being in existence called the Program Committee. W. F.)

The following is the resolution referred to above:

Resolved, That the National Bee-Keepers' Association designate some special day during each year to be observed as "Honey Day", and that the Association ask each of its members, and all other honey producers, a contribution of.....cents for each colony of bees owned by them, to be used in educational work in inducing the public to "Eat More Honey", said sum to be used in all legitimate ways to bring our product before the public; and, be it further

Resolved, That the Board of Directors authorize some competent agent to solicit and collect such money, and use same under their supervision, for the above purposes.

Resolution presented by Mr. Geo. W. Williams.

Bee Inspection.

Mr. E. G. Carr read his paper on Bee-Keeping in New Jersey. Following Mr. Carr's paper, Prof. Pettit, Mr. Frank Pellett, Dr. Bohrer and others spoke on various phases of the foul brood situation.

Dr. J. S. Ward read the paper of J. E. Pleasants entitled "Bee-Keeping in California".

"California Apiculture up and down", by J. D. Bixby, was read by Wesley Foster.

Mr. Moore read "Bee-Keeping as a Money Making Proposition", by J. J. Wilder.

By general consent Mr. C. P. Dadant was made eligible to serve on committees.

Adjournment.

Sub-Committees of Policy and Extension Committee.

Purchase and Sale of Supplies: Frank C. Pellett, E. G. Carr, E. D. Townsend.

Code and Policy: E. J. Baxter, J. H. Stoneman, D. C. Polhemus.

Publicity: W. B. Moore, Dr. E. F. Phillips, Geo. W. Williams.

MORNING SESSION, FEBRUARY 18, 1914, 9:15 A. M.

President Gates called the Convention to order and asked Mr. E. J. Baxter to take the chair, during the reading and discussion of papers.

Mr. Moore read paper by H. F. Hellenmeyer on "Kentucky as a Bee State".

Mr. Wesley Foster read Prof. H. F. Wilson's paper, "Development of Apiculture in Oregon".

After the reading of these papers President Gates again took the Chair.

Upon consent of the Association Mr. Baxter and Mr. Moore were permitted to have equal votes in representing the Illinois Association.

The Committee on Purchase and Sale reported through Mr. Frank C. Pellett, Chairman, as follows:

The profit on the sale of supplies by the National was not over 6 per cent, a total amount of $384 on the year's sales of supplies.

The Resolution of Dr. E. F. Phillips was reported back to the Convention without recommendation, by the Purchase and Sale Committee.

Signed, FRANK C. PELLETT,
Chairman.

Note—Resolution of Dr. Phillips is attached to this original copy.

The report of Committee on Purchase and Sale was unanimously voted to be laid on the table.

The Committee on Publicity through Mr. W. B. Moore, Chairman, reported as follows: We, your Committee on Publicity recommend that this Convention take action authorizing the Directors to dispose of the Review to the best advantage to the Association.

Signed, W. B. MOORE,
Chairman.

The report of the Publicity Committee voted to be laid on the table.

The Committee on Policy and Extension reported through Chairman J. S. Ward as follows:

Your Committee on Policy and Extension submit the following report; on the question of the Review officials acting as purchasing agents for the members of the National.

1st. We recommend that the policy of the National with the Managers of the Review acting as agents in the purchase of supplies and sale of products for all bona fide members of the National be continued.

2d. The Board of Directors to arrange for three or four purchasing agents—said agents to be subject to the Board of Directors.

3d. Said agents to be selected as far as possible from the Board of Directors.

Signed by Committee,

J. S. Ward, Chairman.
Geo. W. Williams,
D. C. Polhemus.

The report of the Committee on Policy and Extension was voted laid on the table.

The motion was made and carried to take up the election of officers as the next order of business.

The motion was made and carried that Dr. Burton N. Gates be given the unanimous vote of the delegates for President.

Frank S. Pellett and D. C. Polhemus were nominated for Vice-President. Mr. Pellett was elected Vice-President by a vote of 22.

E. G. Carr and Geo. W. Williams were nominated for Secretary. Mr. Williams was elected by a vote of 20.

The motion was made and carried that the Secretary be instructed to cast one ballot for Mr. Williams as Treasurer.

The resignation of Mr. Wilmon Newell as Director, who had one more year to serve, was accepted.

The report of the Standing Committee on Code and Policy was given by E. J. Baxter, Chairman, as follows:

Your Standing Committee on Code and Policy would recommend that for the current year we continue our present policy in regard to publication and supplies, provided it is done so as not to bind the members of the Association in a financial way. We would further recommend the adoption of the resolution reported by the Committee on Publicity to take effect not later than the first of January, 1915, and that the Board of Directors be authorized to take action to carry out these recommendations, if adopted

Signed, E. J. BAXTER,
Chairman.

The motion made to divide the report of the Code and Policy Committee and vote on the two propositions separately was lost.

The Code and Policy Committee's report was voted to be laid on the table.

Adjournment.

GENERAL SESSION — AFTERNOON MEETING, FEBRUARY 18, 1914, 1 P. M.

Mr. C. P. Dadant presided at the general session for the discussion of general bee-keeping topics.

The paper by Prof. H. A. Surface, on Soil Fertility and Honey Production, was read.

Paper, Sweet Clover for Bee Pasture, by E. E. Barton, Falmouth, Ky.

Paper, Selective Breeding, by Geo. B. Howe, Black River, N. Y.

Ben G. Davis, Mr. Darby, Mr. Sladen, Mr. Pettit and others spoke in the general discussion.

Adjournment.

DELEGATE SESSION—AFTERNOON, FEBRUARY 18, 1914, 1 P. M.

President Gates called the delegate meeting to order and, after roll call, fifteen delegates and voting strength of 39 being present, President Gates opened up the matter of incorporation by reading letters from a lawyer he had consulted and also from the Attorney General of Illinois.

After considerable discussion Mr. Moore moved that the National Bee-Keepers' Association incorporate as a fraternal and educational Association. Mr. Bohrer seconded the motion.

A motion was made to amend the original motion to include and add the words, Co-operative Association without profit. The motion to amend the original motion was lost.

A motion was then made to amend the original motion by inserting the words "Co-operative Association". The motion was lost.

A motion was then made, viz.:

Moved that the National Bee-Keepers' Association proceed to incorporate as a fraternal and educational association and to continue the publication of the Review and the handling of supplies as in the past. The motion carried by a vote of 23 to 16.

A proposed amendment to the original motion was then made to read 'as long as necessary to dispose of the goods already ordered and to dispose of the Review.' The proposed amendment was laid on the table.

A motion was then made to amend the original motion by inserting the following: 'provided, however, that the Board of Directors shall have the power to discontinue the publication of the Review and the purchase of supplies for its members whenever they deem the same will be for the best interests of the Association.' This amendment was accepted by common consent.

The original motion with the accepted amendment then passed by a vote of 32 for to 1 against.

The proposed constitution as published in the Review was taken up. Section 1, Article 4.

Section 2.

Section 3. All rejected.

Article 4, passed.

Articles 5, 6, 7, by general consent were laid on the table indefinitely.

It was moved and carried that the Delegate Body go into Executive Session to revise the Constitution.

Moved that the Chair appoint a committee of three on Constitution to make a draft of a Constitution and report insofar as drafted at close of evening session to a committee of the whole. Carried.

The Committee on Constitution here was specified to consist of the President, Vice-President and Secretary-Treasurer.

EVENING SESSION, FEBRUARY 18, 1914.

Dr. Burton N. Gates called the Convention to order after a photograph of the delegates and attending bee-keepers had been taken.

Mr. C. P. Dadant spoke of Bee-Keeping in Europe.

Dr. E. F. Phillips showed the film "The Honey Bee Illustrated".

Prof. Morley Pettit showed lantern slides illustrating bee-keeping in Canada and especially the work of the Ontario Agricultural College in Apicultural education.

Mr. Wesley Foster illustrated Colorado bee-keeping with forty slides.

Entertainment film (Western) courtesy of Mr. Holekamp.

Comedy film, courtesy of Mr. Holekamp.

Rerun of the Government film.

Music furnished by the courtesy of Mr. Holekamp.

A rising vote of thanks was extended Mr. Holekamp for the royal manner in which he entertained us. Adjournment.

MORNING SESSION. FEBRUARY 19, 1914, 9:30 A. M.

Dr. Gates called the convention to order.

Mr. E. S. Miller, of Valparaiso, Indiana, read his paper, "The Perfect Bee Cellar".

Questions and general discussion was brought out by Mr. Miller's paper.

Dr. E. F. Phillips read his paper on Humidity and Wintering, which was followed by active discussion.

It was moved and seconded that the delegates withdraw and sit in Executive Session. Motion lost. General session continued.

Mr. Crane's paper read by title.

Mr. J. J. Anderson's paper read by title.

Mr. F. W. L. Sladen read his paper on Nectar Secretion.

Discussion followed the reading of this paper.

Mr. J. M. Buchanan read his paper on Direct Introduction of Queens.

Dr. Burton N. Gates gave his paper on the Standardization of Bee-Keepers' supplies. Discussion followed.

A Standardization Committee with Gates as Chairman was voted to be appointed.

Demonstration of the National Grading rules was given at the close of the morning session by Wesley Foster.

Adjournment at 12:15 p. m. to 2:00 p. m.

AFTERNOON SESSION, FEBRUARY 19, 1914, 1 P. M.

DELEGATE SESSION.

Dr. Burton N. Gates, President, called the Session to order, and after roll call, the report of the Resolutions Commit-

tee was read by Dr. E. F. Phillips for Dr. Bohrer, Chairman.

Resolved, That the National Bee-Keepers' Association through its meeting of delegates in session at St. Louis, Mo., expresses the deep regret of the bee-keepers in the untimely death of its director, Mr. F. B. Cavanagh, and extends to his bereaved family the deepest sympathy.

Resolved, That we extend to Mr. R. A. Holekamp, of the local committee, our hearty thanks for his untiring efforts in making our meeting one of the most pleasant in the history of the organization.

Resolved, That we extend to the management of the Planters' Hotel our thanks for their many courtesies.

Resolved, That we extend to The Blanke and Hauk Bee Supply Co., our thanks for sending out notices concerning the meeting.

Resolved, That we extend to the families of Mr. A. A. Ledington, Wm. McEvoy and Oliver Foster the sympathy of the membership of the National Bee-Keepers' Association on their deaths.

Signed,

DR. BOHRER,
W. B. MOORE,
E. F. PHILLIPS.

The report of the Resolutions Committee was received and adopted and the Secretary instructed to copy resolutions and mail them to the families of the deceased.

The election of two directors for two years and one director for one year was taken up.

Mr. Geo. W. Williams was elected for two years.

Mr. E. G. Carr was elected for two years.

Mr. J. M. Buchanan was elected for one year.

Mr. E. D. Townsend and Mr. Foster hold over one year.

The resolution that Mr. Townsend's recommendations concerning paper and print for the Review be unanimously approved was passed.

The matter of incorporation was taken up and proposed articles of incorporation were read.

Motion made and carried that "Executive Committee" be subsituted for Board of Directors.

Moved and passed by common consent that all the duties of the officers be put in the By-Laws.

The following Resolution was also passed by common consent:

Resolved, That routine business and executive duties shall fall to the Executive Committee consisting of President, Vice-President and the Secretary-Treasurer; and that special and new business within the province of the Association and consistent with the Constitution and By-laws shall fall to the Board of Directors through their proper committee. Further that matters of new policy shall come before the delegate body or be referred back to the affiliated body.

The report of the Committee on Purchase and Sale was taken from the table and action upon the report indefinitely postponed and the Committee discharged.

The report of the Committee on Publicity was handled in the same manner and the Committee discharged.

The Standing Committee on Code having reported was discharged.

The report of the Committee on Policy and Extension was accepted and report considered as final policy of the Association. Committee discharged.

The Crop Report Committee reported:

We, your Committee on Crop Report, suggest that it would be to the advantage of many bee-keepers living in the northern states to have a third letter and inquiry and consequent report on crop conditions taken not later than September 1st, in addition to the two already proposed by the bureau of crop statistics, in order to get an estimate of the fall crop.

Signed, FRANK C. PELLETT,
Chairman.

The report was accepted.

The Committee on Consitution reported as follows:

We, your Committee on Constitution, report that the proposed amendments published in the Review were found to be so hastily drawn that we could do nothing practicable with them, and inasmuch as the proposed Constitution was handled in Committee of the whole we ask to be discharged with this brief report.

Signed, WESLEY FOSTER,
Chairman.

The report was accepted and Committee discharged.

Adjournment of 1914 Convention.

LIST OF MEMBERS

—— OF THE ——

Illinois State Bee-Keepers' Association

FOR 1914,

and Statistical Report for 1913,

AS FAR AS SENT IN TO THE SECRETARY.

(Where no State is given "Illinois" is understood.)

NAME AND ADDRESS.	How Many Colonies?.....	Comb Honey in 1913.....	Extracted Honey In 1913.....	Is There Foul Brood In Your County?..
Ahlers, H. C.—West Bend, Wis.....	....	....	....	....
Allen, Alfred—R. 3, McLeansboro, Ill.....	....	....	....	....
Anderson, J. L.—Harvard, Ill.....	40	2250	175	Yes
Anthony, A. B.—Sterling, Ill.....	75	4800	780	....
Arnold, F. X.—Deer Plain, Ill.....	263	2500	3000	Yes
Augestine, A. A.—R. 1, Dakota, Ill.....	37	1200	1700	Yes
Baldridge, M. M.—St. Charles, Ill.....	....	....	....	....
Bamberger, John—Freeport, Ill.....	....	....	....	....
Barkemeyer, B. D.—302 Chicago Ave., Oak Park, Ill.	....	....	....	....
Barr, C. W.—Gardner, Ill.....	70	1400	400	Yes
Baxter, Dr. A. C.—1418 Holmes Ave., Spfg., Ill...	7	554	....	Yes
Baxter, Emil J.—Nauvoo, Ill.....	....	....	....	....
Beaver, Wallace R.—Lincoln, Ill.....	21	1000	500	Yes
Becker, Chas.—Pleasant Plains, Ill.....	....	....	....	....
Beeler, David S.—R. 5, Springfield, Ill.....	....	....	....	....
Beeler, J. M.—R. 1, Springfield, Ill.....	....	....	....	....
Benecke, Rev. W. F.—Dieterick, Ill.....	15	400	....	No
Benson, August—R. 2, Prophetstown, Ill.....	52	700	1100	Yes
Bent, Jay—Milledgeville, Ill.....	....	....	....	....
Bishop, Frank—Virden, Ill.....	....	....	....	....
Bishop, W. W.—Virginia, Ill.....	5	350	....	Yes
Blume, W. B.—Norwood Park Station, Chicago	....	....	....	....
Bodenschatz, Adam—Lemont, Ill.....	250	3000	22000	Yes
Bolt, R.—Fulton, Ill.....	80	3000	300	Yes
Bonvallet, Louis—St. Anne, Ill.....	....	....	....	....
Boone, E. A.—Shelbyville, Ill.....	15	200	60	No
Bowen, J. W.—Jacksonville, Ill.....	....	....	....	....
Bragg, James—Fairmount, Ill.	53	800	120	Yes
Brelsford, W. H.—Kenney, Ill.....	21	700	....	....
Brinckerhoff, Dr. J. J.—Minooka, Ill.....	3	400	....	....
Broullette, J. B.—St. Anne, Ill.....	....	....	....	....
Brown, Mrs. E. W.—Willow Springs, Ill.....	100	....	8000	....
Brubaker, W. H.—R. 3, Freeport, Ill.....	....	....	....	....
Bruner, E. H.—3836 N. 44th Ave., Chicago.....	275	....	....	....
Budlong, W. A.—1529 14th Ave., Rockford, Ill...	....	....	....	....
Bull, John C.—Valparaiso, Ind.....	165	....	12500	Yes
Burrows, Chas.—810 N. McLean St., Lincoln Ill.	....	....	....	....

E. D. TOWNSEND.
Northstar, Mich.
Editor of the Review.

NAME AND ADDRESS.	How Many Colonies.....	Comb Honey in 1913.....	Extracted Honey in 1913.....	Is There Foul Brood In Your County?.
Burnett, R. A.—199 S. Water St., Chicago.....	....	....	....	....
Burtis, Eugene—Grover, Pa.	....	....	....	....
Caldwell, C. S.—Elvaston, Ill.....	60	....	3500	Yes
Campbell, John C.—919 Hearst Bldg., Chicago..	....	....	....	....
Carrice, John G.—Barnett, Ill.....	12	100	....	Yes
Cuniford, C. J.—Pecatonica, Ill.....	....	....	....	....
Chas Bros.—Rochester, N. Y.....	....	....	....	....
Cheeseman, J. A.—Pesotum, Ill.....	26	3400	....	....
Clark, Frank—Riddot, Ill.....	....	....	....	....
Claussen, S. S.—Oregon, Ill., (R. 3).....	20	1000	90	Yes
Cooke, H. M.—Pecatonica, Ill.....	....	....	....	....
Coppin, Aaron—Wenona, Ill.....	175	6000	1400	Yes
Craven, Thomas—Seneca, Ill.....	20	....	4000	....
Crepes, S. F.—Donovan, Ill.....	....	....	....	....
Crotzer, A. S.—Lena, Ill.....	62	3400	....	....
Dadant, L. C.—Hamilton, Ill.....	....	....	....	....
Dailey, Wm. E.—R. 3, Woodstock, Ill.....	25	4200	....	....
Deem, B. L.—Colona, Ill.....	8	....	200	....
Desort, Frank—1308 Ottawa St., Lincoln, Ill.....	....	....	....	....
Diebold, A. J.—Seneca, Ill.....	....	....	....	....
Drake, R. B.—Warren, Ill.....	....	....	....	....
Duby, H. S.—R. 4, St. Anne, Ill.....	....	....	....	....
Duby, Walter—St. Anne, Ill.....	....	....	....	....
Duff, Peter N.—1749 W. 58th St., Chicago.....	....	....	....	....
Dyen, C. W.—St. Anne, Ill.....	....	....	....	....
Einhaus, John—Seneca, Ill.	....	....	....	....
Engle, Tobias—Freeport, Ill.	....	....	....	....
Enigenburg, John, Sr.—Oak Glen, Ill.....	36	700	4900	....
Fairbanks, C. A.—Anamosa, Iowa.....	130	12000	300	....
Falconer, W. W.—3000 N. 48th Ave., Chicago..	....	....	....	....
Finger, C. A.—Marissa, Ill.....	19	400	500	....
Finkenbinder, D. A.—Stockton, Ill.....	16	1000	....	....
Fischer, Henry F.—Bensenville, Ill.....	11	300	1500	....
Flood, Arthur—3346 S. 52d St., Chicago.....	....	....	....	....
Foltz, Adam—Box 27, Woodford, Ill.....	22	....	3000	No
Fosse, E. P.—Marion, Ill.....	74	2200	2600	....
France, L. V.—215 Bruen St., Madison, Wis.....	....	....	....	....
Frank, J. C.—R. 1, Davis, Ill.....	220	500	20000	Yes
Frank, John C.—Dodge City, Kans.....	....	....	....	....
Freundt, Louis J.—104 S Michigan Ave., Chicago	....	....	....	....
Funk, W. M.—Normal, Ill.....	100	1000	8000	Yes
Gettler, Frank—Seneca, Ill.	....	....	....	....
Gill, A. G.—213-231 Institute Place, Chicago...	....	....	....	....
Glasser, W. M.—Dakota, Ill.....	....	....	....	....
Grabbe, F.—Libertyville, Ill.	....	....	....	....
Gray, W. H.—Chillicothe, Ill., (Peoria Co.)....	....	....	....	....
Gulliford, G. L.—Bloomington, Ill.....	31	1200	....	....
Handel, Chas. D.—Savanna, Ill.....	....	....	....	....
Hansel, Charlie—Minooka, Ill.	26	1100	....	....
Hansel, Will—Minooka, Ill.	29	1536	187	....
Harris, G. B.—St. Anne, Ill.....	....	....	....	....
Hastings, Chas.—1825 N. Union St., Decatur, Ill.	....	....	....	....

NAME AND ADDRESS.	How Many Colonies.....	Comb Honey In 1913.....	Extracted Honey In 1913.....	Is There Foul Brood In Your County?.
Haupt, Mrs. Anna—12345 Wallace St., W. Pullman, Ill.	....	....	....	....
Hawkins, K. E.—Plainfield, Ill.	....	....	....	....
Heinold, Fred—Cissna Park, Ill.	48	1500	500	....
Heinzel, Albert O.—Lincoln, Ill.	....	....	....	....
Heise, Paul—Lock Box 444, Warsaw, Ill.	14	725	100	....
Hettel, Mrs. J.—Marine, Ill.	70	400	300	Yes
Hight, Leroy—Cornell, Ill.	....	....	....	....
Hill, H. D.—Lima, Ill.	....	....	....	....
Hinderer, Frank—Frederick, Ill.	72	5500	100	Yes
Hitt, Sam'l H.—Elizabeth, Ill.	72	688	4312	....
Hehner, Peter—R. 1, Henry, Ill.	....	....	....	....
Hoover, L. H.—468 S. Water St., Decatur, Ill.	1	118	....	Yes
Horstman, Wm. H.—6759 Morgan St., Chicago.	....	....	....	....
Hoy, Joseph—Mt. Pulaski, Ill.	....	....	....	....
Humer, Prof. J. M.—1234 Gov. St., Springfield, Ill.	....	....	....	....
Hutt, Joseph G.—1710 S. Wash. St., Peoria, Ill.	59	3500	....	Yes
Hyde, Geo. S.—New Canton, Ill.	....	....	....	....
Hyde, W. H.—New Canton, Ill.	....	....	....	....
Jansen, Wm. F.—R. 2, Quincy, Ill.	90	2800	3250	....
Johnson, James T.—Percy, Ill.	....	....	....	....
Josephson, Mrs. August—Box 121, Granville, Ill.	30	1000	500	....
Kannenberg, C. F.—7111 Augusta St., Oak Park, Ill.	15	240	900	Yes
Kendall, Frank R.—Lock Box 35, Byron, Ill.	18	974	380	Yes
Kendall, Jay S.—Chemung, Ill.	65	3500	600	....
Kennedy, B.—2507 S. State St., Rockford, Ill.	....	....	....	....
Kennedy, Miss L. C.—R. 11, Curran, Ill.	....	....	....	....
Kerley, Josiah—Anna Hospital, Southern, Ill.	....	....	....	....
Kildow, A. L.—Putnam, Ill.	....	....	....	....
King, Harry L.—R. 10, Springfield, Ill.	....	....	....	....
Kluck, N. A.—McConnell, Ill.	....	....	....	....
Kneser, John—Barrington, Ill.	....	....	....	....
Knox, Claire S.—Round Grove, Ill.	25	1300	....	Yes
Kroschel, Robert—3226 Osgood St., Chicago.	18	50	1300	No
Kuczynski, John F.—R. 4, Amboy, Ill.	22	500	500	No
Lampman, H., & Son—Rockton, Ill.	95	8000	1600	Yes
Lange, J. W.—Thawville, Ill.	55	2500	500	No
Laxton, J. G.—Lyndon, Ill.	140	....	16000	Yes
Lee, Arthur—Rockton, Ill.	....	....	....	....
Lee, H. W.—Pecatonica, Ill.	....	....	....	....
Legat, Sylvester—R. 1, Box A, Spring Valley, Ill.	110	....	....	Yes
Lind, H. M.—Baders, Ill.	130	2000	1500	Yes
Lindberg, Elmer—Verona, Ill.	....	....	....	....
Lovell, W. C.—Sycamore, Ill.	....	....	....	....
Ludwig, H. M.—Collinsville, Ill.	....	....	....	....
Lyman, W. C.—Downers Grove, Ill.	65	....	5500	Yes
Markee, J. M.—Liberty, Ill.	20	300	....	....
Marshall William—Carpentersville, Ill.	48	3287	140	....
Martin, M. M.—Caledonia, Ill.	....	....	....	....
Mason, W. E.—Rushville, Ill.	....	....	....	....
May, Fred H.—P. O. Box 34, Meredosia, Ill.	....	....	....	....

NAME AND ADDRESS.	How Many Colonies.....	Comb Honey in 1913.....	Extracted Honey in 1913.....	Is There Foul Brood In Your County?.
McCartney, Geo. R.—716 Rockton Ave., Rockford, Ill.	13	1100	....	No
Miller, E. S.—Valparaiso, Ind.	....	....	....	....
Moore, W. B.—Altona, Ill.	....	....	....	....
Morgan, W. E.—Rushville, Ill.	....	....	....	....
Mottaz, A.—Utica, Ill.	90	1500	13000	Yes
Muchleip, H.—Apple River, Ill.	....	....	....	....
Myers, George—Riverton, Ill.	....	....	....	....
Ness, L. L.—R. 2, Morris, Ill.	180	23000	....	Yes
Norberg, Arthur—Spring Valley, Ill.	....	....	....	....
Nordling, J. C.—912 Belmont St., Chicago	....	....	....	....
Null, Wm. D.—Demopolis, Ala.	....	....	....	....
Oakes, Lannes P.—Joppa, Ill.	....	....	....	....
Olson, John—Davis, Ill.	....	....	....	....
Oppner, Fred—Peotone, Ill.	....	....	....	....
Peake, E. J.—Sec. Hawthorne Farms, Co., Barrington, Ill.	155	7100	13400	Yes
Phoenix, A. B.—Ave, Ill.	46	2000	....	....
Piper, Geo. M.—Chillicothe, Ill.	117	....	....	Yes
Pippenger, M. A.—809 N. McLean St., Lincoln, Ill.	....	....	....	....
Poindexter, Jas.—R. 5, Bloomington, Ill.	39	600	1200	Yes
Pressler, Ellis E.—333 Lycoming St., Williamsport, Pa.	....	....	....	....
Price, Henry—Elizabeth, Ill.	....	....	....	....
Pyles, I. E.—Putnam, Ill.	....	....	....	....
Raftery, J. T.—Hadley, Ill.	34	250	1900	....
Rauchenberg, Wm.—Jefferson Station, Chicago	40	1260	750	....
Reynolds, Alvah—Altona, Ill.	....	....	....	....
Richardson, G. R.—Princeton, Ill.	3	....	....	....
Robbins, Daniel E.—Payson, Ill.	50	200	1100	Yes
Robellard, Joe—St. Anne, Ill.	....	....	....	....
Roberts, Jesse H.—Watseka, Ill.	....	....	....	....
Robertson, I. S.—5324 Ferdinand St., Austin Station, Chicago	5	450	....	....
Rogers, H. D.—Lewistown, Ill.	....	....	....	....
Rolf, Wm.—Hoyleton, Ill.	9	50	800	....
Ross, R. B., Jr.—317 Metcalf Ave., Westmount, Quebec, Canada	....	....	....	....
Russo, Gotleib—3029 N. Leavitt, Chicago	....	....	....	....
Sauer, Geo. L.—Polo, Ill.	125	500	3500	Yes
Sauer, John—R. 5, Springfield, Ill	....	....	....	....
Schmertman, Louis—R. 1, Freeport, Ill.	....	....	....	....
Scholls, J. C.—Watseka, Ill.	....	....	....	....
Schreiber, Dr. G. F.—80 Ill. St., Chicago Heights, Ill.	11	650	50	No
Scroggins, A. C.—R. 3, Mt. Pulaski, Ill.	....	....	....	....
Seastream, Geo.—Pawnee, Ill.	200	....	....	No
Secor, W. G.—Greenfield, Ill.	48	24	2500	....
Seibold, Jacob—Homer, Ill.	30	800	....	Yes
Settle, W. H.—Gridley, Ill.	50	500	5000	Yes
Shaw, Duane—Palestine, Ill.	87	5000	....	Yes
Shawver, Oscar—Casey, Ill.	25	300	....	Yes

NAME AND ADDRESS.	How Many Colonies.....	Comb Honey in 1913.....	Extracted Honey in 1913.....	Is There Foul Brood In Your County?.
Shearer, Hallock—Mt. Carmel, Ill.	20	800	700	Yes
Sherrill, Burt L.—Pittwood, Ill.	....	....	....	....
Shupe, Frank—Mazon, Ill.	....	....	....	....
Simmons, J. R.—Harvey, Ill.	61	504	6800	....
Simpson, Wm. A.—Meyer, Ill.	125	....	....	....
Smith, C. O.—5533 Cornell Ave., Chicago	7	....	1020	....
Smith, E. F.—Chadwick, Ill.	11	....	750	Yes
Smith, W. H.—Danville, Ill.	42	300	1300	....
Snell, F. A.—Milledgeville, Ill.	108	500	5300	....
Sorensen, Walter—Lake Village, Ind.	....	....	....	....
Staley, Arthur—Chicago	....	....	....	....
Stanley, W. H.—Dixon, Ill.	250	5000	....	....
Stockdale, Dr. F. A.—Coal City, Ill.	....	....	....	....
Stumm, Wm. H.—Edinburg, Ill.	22	800	....	Yes
Swanson, A.—3012 W. 22d St., Chicago	20	1000	....	....
Thale, H. H.—Maywood, Mo.	....	....	....	....
Thornton, John A.—Lima, Ill.	140	700	1100	Yes
Truby, S. K.—Maple Park, Ill.	....	....	....	....
Turner, W. P.—Peoria Heights, Ill.	126	5400	1800	....
Tyler, Fred—San Jose, Ill.	10	500	400	Yes
Ulrich, G. E.—Campus, Ill.	5	150	....	....
Valerins, Chas.—Elkville, Ill.	70	2000	500	Yes
Van Butsele, Louis—R. 1, Collinsville, Ill.	40	....	....	....
Van De Wiel, Anton—East Dubuque, Ill.	8	....	500	....
Vaughn, B. O.—Box 35, Auburn, Ill.	75	400	2200	Yes
Vawter, F. E.—Box 165, Industry, Ill.	....	....	....	....
Vogel, Henry—R. 2, Galena, Ill.	70	1500	150	No
Wachter, Martin—Hinsdale, Ill.	13	300	500	....
Watts, C. S.—508 E. Daniel St., Monticello, Ill.	55	4700	450	Yes
Werner, Louis—Edwardsville, Ill.	50	200	300	Yes
Weston, Miss Georgie M.—Geneva, Ill.	....	....	....	....
Wheeler, J. C.—921 Austin Blvd., Oak Park, Ill.	....	....	....	....
Wheeler, J. C.—Oak Park, Ill.	....	....	....	....
Whitmore, H.—Box 551, Momence, Ill.	43	1000	300	Yes
Whitney, Wm. M.—Batavia, Ill.	....	....	....	....
Wicklein, F. A.—Percy, Ill.	19	....	1200	....
Widicus, Daniel—St. Jacob, Ill.	14	....	150	Yes
Wiegand, Adam—1517 Claybourne Ave., Chicago	....	....	....	....
Wilkie, Jas. D.—R. 2, Chicago Heights, Ill.	6	200	....	....
Withrow, E. M.—Mechanicsburg, Ill.	....	....	....	....
Withrow, Master Wilburn—Mechanicsburg, Ill.	....	....	....	....
Woodman, A. G.—Grand Rapids, Mich.	....	....	....	....
Woolsey, Geo. A.—623 Jefferson St., Rockford, Ill.	....	....	....	....
Youla, Chas.—Scales Mound, Ill.	....	....	....	....

Following is a list of the Libraries which have asked to be placed on our mailing list for our reports each year:

New York, State Library.
Illinois University, Library.
Ontario Agricultural College, Library.
Washington, D. C., Library.
U. S. Dept. of Agriculture, Library.
John Crerar, Library.
Maryland State Ent. Library.
Illinois State Library.
Illinois State Historical Library.
State Normal University Library.
Massachusetts Agricultural College, Library.
Indiana Agricultural Experiment Station, Library.
Washington, D. C., Library of Congress.
Seattle Public Library.
Philadelphia, Free Library.
Washington, D. C., Bureau of Entomology.
Califonria University, Library.
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